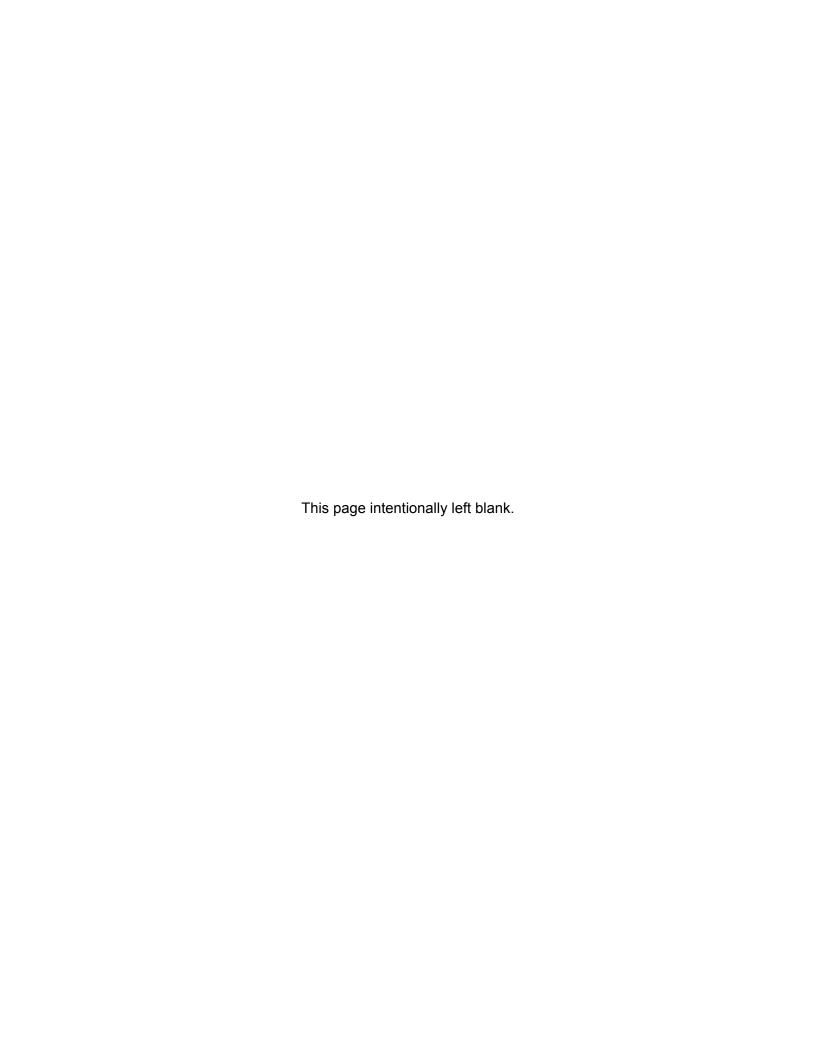
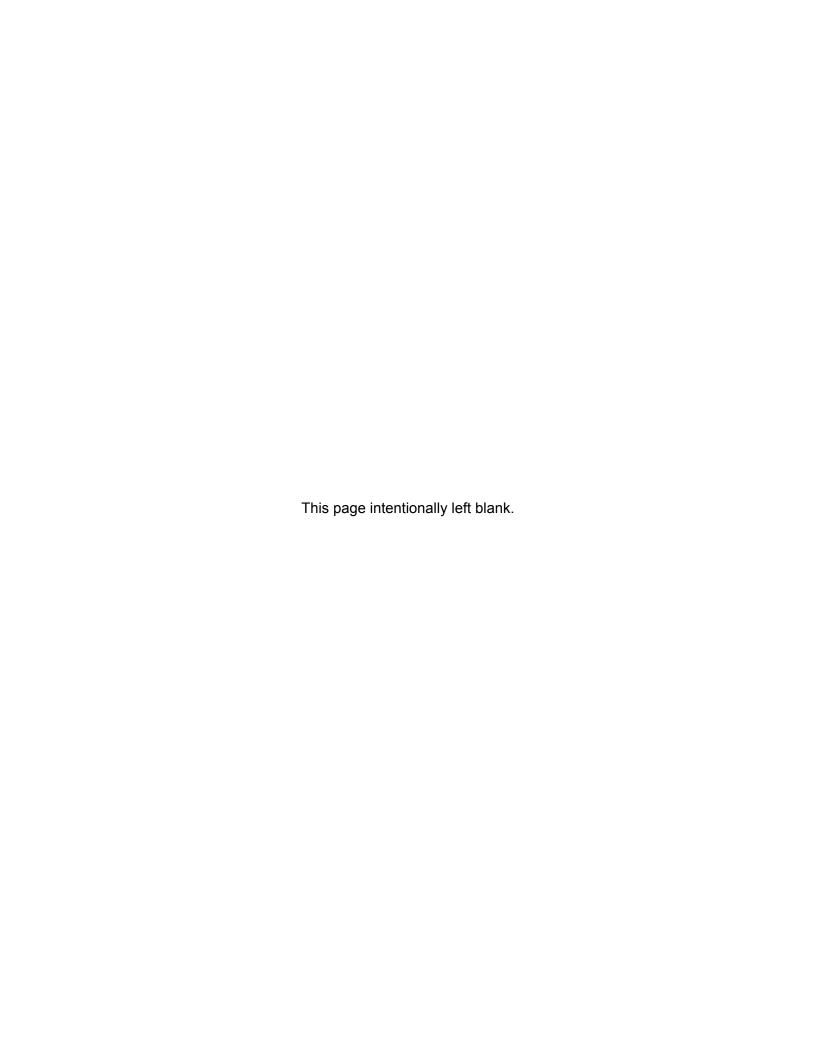


Partnership in Tomorrow October 6 - 8, 1998 Meeting Minutes

Coding Accuracy Support System Multiline Accuracy Support System Cycle 1999 - 2000

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MULTILINE ACCURACY SUPPORT SYSTEM

1999 - 2000 CYCLE REQUIREMENTS

PAGE#

SLIDES

M2.1 - M2.3	1998 - 1999 MASS CYCLE REVIEW	1
M3.1 - M3.2	DISCUSSION ITEMS	1
	MASS-CERTIFIED SYSTEM MACHINE IDENTIFIER PRIVATE MAILBOX DESIGNATION (PMB) GENERATION OF PS FORM 3553 COURTESY CERTIFICATION POLICIES	2 2
M3.3 - M4.3	NORMAL OPERATIONS TESTING REQUIREMENT	3
M5.1 - M5.3	MASS GRADING CHANGES	3
	GRADING FOR STANDARDIZATION DEVELOPER CASS VS. MASS ANSWER EVALUATION END-USER VS. DEVELOPER MASS ANSWER EVALUATION CHANGE IN UNREADABLE BARCODE ALLOWANCE CHANGE IN DELIVERY POINT ERROR ALLOWANCE	4 4
M6.1 - M7.1	ABE BARCODE EVALUATION	5
M7.2 - M8.2	FONTS AND VARYING SIZED CHARACTERS	5
M8.3 - M9.3	CHARACTER RECOGNITION ISSUES	6
M10.1- M11.3	ENCODING SYSTEM ISSUES	8
	LIMITED KEY ENTRY	8
	CODING ACCURACY SUPPORT SYSTEM 1999 - 2000 CYCLE REQUIREMENTS	
SLIDES		PAGE#
C1.3	COMPLETION OF THE CASS/MASS ORDER FORM	9
	PLATFORM CERTIFICATION POLICY SOFTWARE UPDATES VERSION CONTROL COMPLETION OF PS FORM 3553 LOT CHANGES IN STAGE I / II FILE LAYOUTS AND INFORMATION	9 11 11
C8.3 - C9.2	DISCUSSION ITEMS	12
	PRIVATE MAILBOX DESIGNATION (PMB) COLLEGE AND UNIVERSITY ADDRESSING ISSUES PLANET CODE YEAR 2000 COMPLIANCE (Y2K)	12 13
C9.3 - C10.2	NEW GRADING REQUIREMENTS	13
C10.3 - C13.3		

	LAST-LINE-KEY USAGE	15
C14.1 - C15.1	CITY NAME ABBREVIATIONS	17
C15.2 - C17.3	MULTI-FINANCE NUMBER MATCHING	18
	MULTI-FINANCE NUMBER CROSSOVER	
C18.1 - C18.3	STREET NAME SPELLING VARIATIONS	21
C19.1 - C20.1	OVERWEIGHTED STREET COMPONENT MATCHING	22
	ZIPMOVE AND ZONE SPLIT PRODUCTS	23
C20.2 - C20.3	HIGH-RISE DELIVERY POINT CODING RULE MODIFICATION	25
C21.1 - C26.1	UNIQUE ZIP CODE LOGIC CHANGES	26
C26.2 - C26.3	KEYWORD STREET NAME MATCHING	27
C27.1 - C27.3	MATCHING ADDRESSES CONTAINING DUAL ADDRESS INFORMATION	27
C28.1 - C29.1	MULTIPLE PARSE STREET NAME VARIATIONS	28
C29.2 - C31.2	MULTI-FIELD ADDRESSES	29
C31.3 - C33.1	MAGNET STREET SYNDROME	29
	TRAILING NUMERIC IN THE STREET NAME	31
C33.2 - C34.1	NORMALIZED STREET PROCESSING	32
C34.2 - C35.2	CALCULATING DELIVERY POINTS FOR MILITARY, RR, AND HC DEFAULT MATCHES	32
C35.3 - C36.3	HIGH-RISE DEFAULT ALTERNATE PROCESSING	33
C37.1 - C41.2	PUERTO RICO CODING ISSUES	36
	MATCHING USING THE URBANIZATION VALUE AS TIEBREAKERRETENTION OF INPUT URBANIZATION VALUESCOMMON SPANISH ABBREVIATIONS	37
	Translation of "BUZON"	
C41.3 - C43.2	FRONT-LOADED STRING COMPARISONS	38
C43.3 - C45.2	LINE OF TRAVEL (LOT)	39
	APPENDICES	

PS FORM 3553 (ELECTRONIC DOCUMENT CONTAINED IN PSF3553.PDF FILE)
COMPLETING PS FORM 3553
FEDERAL REGISTER DRAFT - DELIVERY OF MAIL TO A CMRA
STAGE I/II FILE LAYOUT & DATA ELEMENT LISTING
CATEGORY MATRIX GUIDE
ATTENDEE LIST
MASS SLIDES (ELECTRONIC DOCUMENT CONTAINED IN MASS9900.PPT FILE)
CASS SLIDES (ELECTRONIC DOCUMENT CONTAINED IN CASS9900.PPT FILE)

M2.1 - M2.3 1998 - 1999 MASS Cycle Review

The Multiline Accuracy Support System (MASS) topic was the opening discussion of the Partnership In Tomorrow meeting. A review was held of the current MASS cycle issues.

Of significant concern in the limited testing performed under the current MASS cycle was the inability of many developers to produce and distribute their products before the original deadline of July 31, 1998. Because of the delay by the developers, it was necessary to extend the deadline for certification until September 30, 1998. This deadline was extended again until November 30, 1998, for the same reason; the inability by MASS system developers to produce and distribute a production-worthy release.

Another disappointing factor in the limited 1998 - 1999 MASS testing cycle was the failure of many end-users to comply with the simple requirements established to obtain ongoing MASS certification. All that was required for end-users to obtain MASS certification through July 31, 1999, was for them to submit an order form and a completed PS Form 3553 showing the installation of updated MASS software. Even with these limited requirements, only half of all eligible end-users completed the steps necessary to obtain the extension.

For those developers and end-users who did not complete the 1998 - 1999 MASS cycle requirements before September 30, 1998, the opportunity to obtain their 1998 - 1999 MASS certification extension under the simplified requirements was withdrawn. Developers and end-users who were not certified by September 30, 1998, must process a MASS test deck and pass to retain MASS certification. Any MASS system not certified before November 30, 1998, may not be used to obtain automation discounts until it has obtained MASS certification.

M3.1 - M3.2 Discussion Items

MASS-Certified System Machine Identifier

A discussion about a policy issue under consideration by the CASS Department regarding the establishment of a requirement for MASS-certified systems to print a unique identifier on every mailpiece was conducted. The intent of the discussion was to advise the industry of the potential change in requirements and to allow the industry time to analyze and respond to the issue.

With the implementation of FASTforward, a requirement was established that every multiline system that sprays a new address on a mailpiece also spray a code to identify that specific machine. As the CASS Department reviews mailpieces miscoded by commercial multiline systems, the need to be able to identify which specific multiline system produced the error has arisen. This has led to the suggestion that the FASTforward style identifier be used on all mailpieces coming off a MASS-certified system.

The CASS Department has proposed to other postal organizations that new language be implemented within the Domestic Mail Manual to require a specific identifier on every mailpiece produced by a either a CASS-certified software product or by a MASS-certified system. The issue is being considered by the affected postal organizations and may be established as a requirement in the future.

Private Mailbox Designation (PMB)

See the same topic discussion later within this document.

Of particular concern for a MASS-certified system is that it recognize the possibility of the PMB address occurring on the delivery address line or being placed immediately above the last-line. MASS-certified systems must be able to detect the "PMB" designation correctly and not miscode to a "PO BOX" address.

Generation of PS Form 3553

A question was posed to the attendees whether any limitation existed for MASS-certified systems to produce a PS Form 3553 as part of their normal operations. The response from the attendees was that no such limitation existed and that all systems were capable of producing this form.

An issue has been recognized that not all mailers are providing valid PS Form 3553 information. One case that has been identified is where the mailer had more than one piece of equipment to apply barcodes to mailpieces, but only one of the systems was MASS-certified. The requirement is that all of the equipment used to apply barcodes be MASS-certified, however, enforcement of this is not always practical. The mailer was using non-MASS-certified equipment in the day to day operations, and producing a manual PS Form 3553 showing all of the barcodes as assigned on the one system which was MASS-certified.

A suggestion was presented to the attendees that any networked multiline or desktop barcoding systems should show each serial number used on PS Form 3553. The potential of a "system-specific identifier" as discussed previously would also help in identifying when non-MASS-certified systems were being used. The attendees were asked to help the Postal Service come up with a workable solution to this problem.

Courtesy Certification Policies

A requirement exists for customers to notify the CASS Department whenever a MASS-certified system is moved or upgraded. A review of the policy took place to insure that all MASS system developers understood the requirements to better support their customers.

The CASS Department recognizes that when a customer purchases a new system, they have legitimate business reasons to put the system into immediate operation. Having to wait for MASS-certification is impractical and costly. To address this issue, the CASS Department provides a 45 day "courtesy certification" window for newly installed systems. During this 45 day window, the customer can use the system to produce and submit mail and qualify for automation rates, **only after receiving clearance from the CASS Department**. The customer is required to order and complete MASS certification during this 45 day window. If the customer has not completed MASS certification within 45 days from the time the system is put into operation, that system is not eligible to submit mail at automation rates after the 45th day. This same 45 day window is allowed for any system relocation or upgrade. A relocation is considered to be any movement of a system requiring disassembly and reassembly of the system. This may be from one building to another, or from one side of a building to another. If the machine has to be disassembled and reassembled, it will require recertification. An upgrade to a system is defined as any change in the host computer system's operating system, the

system's cameras, or any software used to operate the system, unless a waiver has been granted at a manufacturer level for the change.

M3.3 - M4.3 Normal Operations Testing Requirement

All MASS certifications are to be performed in a "normal operations" state. This means that the system must be configured in the exact same state it is when used to produce mail for automation discounts.

For systems that are FASTforward equipped, the FASTforward interface must be operational. The MASS test deck may include addresses which are forwardable. If the processing does not forward any of the forwardable pieces, the assumption will be that the FASTforward system was not operational and the test will be invalidated. If at least one forwardable mailpiece is shown to be produced by the FASTforward interface, the test deck will be considered valid and submitted for grading. The MASS grading will not evaluate the accuracy of the FASTforward answer, only the fact that the interface was functioning. Any answer on forwardable mailpieces that are not assigned a new address will be graded based on the accuracy of the response to the input question.

Where a MASS-certified system would normally spray a 5-digit ZIP Code on a production mailpiece, it must also spray a 5-digit ZIP Code on the MASS test mailpiece.

M5.1 - M5.3 MASS Grading Changes

Several changes in MASS grading will be implemented in the 1999 - 2000 cycle.

Grading for Standardization

The current CASS test that MASS developers are required to complete does not grade for address standardization. This will be changed in the 1999 - 2000 cycle. The CASS test that MASS developers must first complete will now be graded for accurate address standardization. The reason that grading for address standardization is being added is to verify that the software is not losing or modifying critical address components. This is especially significant in multiline systems that are FASTforward equipped.

Developer CASS vs. MASS Answer Evaluation

A frequent problem that has been detected is differences between the answers returned on the CASS portion of the MASS test and the same question asked via a MASS test mailpiece. Since the CASS question is not impacted by optical character recognition issues, the CASS question produces correct postal code assignments. However, when the same question is presented on a mailpiece during the MASS testing process, the optical character recognition issues cause a different answer to be produced. The different answer may be a lower depth-of-code response or an answer for a different address.

In the 1999 - 2000 cycle, the answers returned by developers on MASS test mailpieces will be compared to the same question asked within the CASS test. Where the answer on the mailpiece is different from, and of lower quality than, the CASS answer, two errors will be assessed. If the MASS answer is a better answer than the CASS answer, no additional error assessment will be made. This comparison of answers between the CASS and MASS test will only be performed on the developer's tests. No comparison of answers between the developer's CASS test and an end-user's MASS test will occur. However, the answers from the developers MASS test will be compared to answers received from end-user MASS tests as described below.

End-user vs. Developer MASS Answer Evaluation

In the 1999 - 2000 cycle, the barcode answer returned by an end-user on a MASS mailpiece will be compared to the same answer returned by the developer on a MASS mailpiece. Where the answer is different from, *and of lower quality than*, the same answer returned on the developer's MASS test, the end-user's test will be assessed two errors. If the end-user returns a better answer than the developer did, no additional error assessment will be made.

Change in Unreadable Barcode Allowance

In the current and past CASS cycles, an allowance was given on MASS tests for unreadable barcodes. Unreadable barcodes were defined as any barcode on a MASS mailpiece where the physical barcode was detected by our reader equipment but the barcode could not be correctly interpreted. If less than 5% of the total pieces returned fell into this category of unreadable, then these mailpieces were set aside and not included in the grading process.

Within the 1999 - 2000 cycle, the 5% allowance will be reduced to 2.5%. Where less than 2.5% of the barcodes are unreadable, they will be omitted from the grading process. If more than 2.5% of the barcodes returned fall into the unreadable category, all of the pieces containing the unreadable barcodes will be checked on a production-worthy Automated Barcode Evaluator (ABE) system. See the ABE section discussed later in this document.

Change in Delivery Point Error Allowance

In the past and current CASS cycles, MASS test mailpieces were allowed up to 1% delivery point error rate without penalty. A delivery point error was assessed only if the ZIP Code and the add-on code were correct, but the delivery point values were incorrect. As long as the delivery point error rate was 1% or less, no penalty was incurred.

In the 1999 - 2000 cycle, the delivery point error allowance will be reduced to .75% of the total number of mailpieces graded. Where a developer is assessed a double error because of differences between their CASS and MASS answers, no additional error will be assessed for an incorrect delivery point. Where an end-user test is assessed a double error because of a different answer between their MASS test and the developer's MASS test, no additional error will be assessed because of an incorrect delivery point.

M6.1 - M7.1 ABE Barcode Evaluation

The Automated Barcode Evaluator (ABE) system will be utilized in grading of MASS decks where a test deck exceeds the 2.5% unreadable barcode allowance. When more than 2.5% of the returned test deck mailpieces contain an unreadable barcode, all of the mailpieces with an unreadable barcode will be checked on the ABE system. If the ABE system reports that a barcode is unreadable, the mailpiece will be graded as an automatic failure. If the ABE system reports that a barcode is readable, the mailpiece will be manually graded and scored accordingly.

To assist MASS users in evaluating the performance of their equipment, the CASS Department will offer a free, 100 piece test deck that can help in diagnosing a system's performance. The ABE test deck can be graded on a production-worthy ABE system by the CASS Department and the results provided. The free ABE evaluation will not impact any existing MASS certification status.

M7.2 - M8.2 Fonts and Varying Sized Characters

To date, the MASS test mailpieces produced have been presented with a standard, all-uppercase format and have used a single font. Within the 1999 - 2000 cycle, the MASS test mailpieces will be changed to include the use of multiple fonts, mixed case, and varied spacing. This change is intended to better reflect the type of mail typically processed by MASS equipment and to identify where systems may have need of improvement.

In addition to using different fonts, mixed case, and variable spacing within a MASS mailpiece, another change will be included that presents address information on multiple lines. As shown in slide 8.2, the secondary information appears on a separate line. If a system does not take the secondary information into account, it will not be able to code to the best depth-of-sort and that mailpiece will fail to achieve optimal processing.

MASS test mailpieces may include conditions where the address information is located on more than one line. Since customers do not consistently place address data in the same place, MASS mailpieces may "roll" the additional address information both up and down. For example:

Apt 10	123 Main St	8002 E County Rd
123 Main St	Apt 10	100 N
Memphis TN 38101	Memphis TN 38101	Indianapolis IN 46234

Note the third example where either line, if processed separately, could result in a match. Where addresses of this type are presented in the MASS test, three possible answers might be made. Where the system correctly assembles the address to become "8002 E County Rd 100 N", it should correctly match. However, if the system treats either line separately, it may produce an erroneous match.

To allow MASS developers time to analyze their system's performance, grading of multiline addresses will accept a match based on either line separately, or the correct match achieved by combining both lines. Any answer that does not match one of these conditions will be graded incorrect. The grading policy for multiline addresses may change in future MASS cycles as more information is developed about how systems are handling these types of addresses.

Another change in the MASS mailpiece will be the random insertion of a POSTNET barcode into the address block. The POSTNET barcode may or may not be valid for the text address data. The text address may or may not produce a valid match. MASS-certified systems may not default the match by outputting the address block barcode in the lower right location without the text address having matched to the ZIP+4 File, unless a separate PS Form 3553 which documents that the addresses were updated using a CASS-certified process.

M8.3 - M9.3 Character Recognition Issues

Because optical character recognition can be impacted by the character font, size, and other printing variables found in an address, the potential for character misinterpretation exists. There are several characters, shown in slide 9.2, that routinely produce "collisions" with other characters. The MASS test will be modified to specifically test system performance when it has to deal with character interpretation issues. The goal of the Postal Service's CASS Department is to have MASS-certified equipment perform consistently. This goal is difficult to achieve when a system reacts differently to the same address and correctly interprets a character one time and then misinterprets the same character another time.

Where a character within a mailpiece can cause a match to more than one ZIP+4 record, depending on how the character is interpreted, MASS-certified software must either correctly interpret the character or it may opt to not make an assignment. In MASS grading, a non-answer will be considered a valid response where a question involving a potential character collision exists. The same decision must be made consistently, and there may be multiple occurrences of the same address within the MASS test to validate the consistent performance.

Example:

ZIP	Prim	Prim	Pre			Post		Last-Line-
Code	Low	High	Dir	Street Name	Suffix	Dir	ZIP+4	Key
98388	400	498		1 ST	ST		1002	Z17576
98403	400	498	N	I	ST		1915	Z17597
98403	400	498	N	L	ST		1628	Z17597

If a MASS system elects to not select a match in a situation where more than one possible match is possible, it will be graded as correct. The MASS system must perform consistently in production operations and must make the same decision when the same circumstances are present.

This same issue of character recognition influences how systems evaluate primary and secondary address values. It is especially critical in high-rise matches and rural route matches since these address formats routinely include alphanumeric values. Where a system is presented with an alphanumeric value, it relies on the data found in the ZIP+4 File to guide it towards a correct interpretation. If the ZIP+4 File does not show any alphanumeric address values for the address being evaluated, a decision might be made that the input address value is a numeric. If the ZIP+4 File shows alphabetic characters for the input address value, they will be used to resolve the character interpretation. The problem occurs where there is an absence of a clear guide from the ZIP+4 File data. This occurs when an address with a trailing alpha character is "rolled" into an all-numeric range on the ZIP+4 File. For example, assume the following data is present:

ZIP+4 File

Prim	Prim	Pre			Post	
Low	High	Dir	Street Name	Suffix	Dir	ZIP+4
100	198		MAIN	AVE		1234
1000	1098		MAIN	AVE		1235

If an input address of "104B Main Ave" is read from a mailpiece, the "B" character could be interpreted as a "B" or as an "8". In this case, the ZIP+4 File does not give any assistance in determining which interpretation is the correct one since the "B" value can actually exist in the 100 to 198 range. Software is left to resolve this interpretation on its own.

The MASS test will include address values that are subject to misinterpretation. Where a system is faced with multiple possible resolutions, it may select a lower depth-of-code match as appropriate. If a lower depth-of-code match is not available, the system must either correctly assign the address or choose to not match at all. If the decision is made to match to a lower depth-of-code record, or to not match at all, it will be considered correct in MASS grading.

M10.1- M11.3 Encoding System Issues

A reminder was given to all encoding system developers that any certification attempt must be performed by the end-user. No person outside of the end-user or those persons employed directly by the end-user may be used to complete an encoding system test. Any discovery that unauthorized persons participated in the completion of the encoding system test will result in decertification.

Limited Key Entry

Due to the nature of encoding operations, the maximum payback for end-users occurs when they can achieve a match with the fewest keystrokes possible. To accomplish this maximum payback, encoding systems are designed with a "limited key" method of operation. The assumption in this design is that a valid match can be derived based on very little input, usually the ZIP Code, the primary number and a couple of characters from the street name.

Although the assumption holds true in many, if not most, cases, there are circumstances where the assumption will not be true. Encountering these situations may cause a valid address to be miscoded and delivery misdirected. To ensure that MASS-certified encoding systems handle these circumstances, test mailpieces will be presented to exercise the system performance.

As shown in slides 11.1 and 11.2, an abbreviated address will be presented on the encoding system test mailpiece. In the first case, there is insufficient information to make a selection. In the second case, sufficient information is presented. Encoding systems are expected to reject the first address and to correctly code the second address.

Another common error seen in encoding system assignments is failure to achieve the best depth-of-code based on the address data provided. This can result when the operator fails to key a critical address element such as the apartment number or the firm name. Encoding systems must be capable to identify and prompt the operator when an input address would normally require additional data, such as a match to a high-rise record or to a firm record.

Within the 1999 - 2000 MASS testing cycle, any encoding system test that does not return the best depth-of-code due to a failure of the operator to key a required component will result in two errors being assessed. The argument put forth by developers and end-users that they cannot be responsible for operator keying failures is underwhelming, and not acceptable.

End of MASS Minutes

C1.3 Completion of the CASS/MASS Order Form

To expedite the ordering and fulfillment process, CASS will allow orders to be requested and fulfilled via the Internet. To establish electronic fulfillment service, contact the CASS Department to receive the required paperwork to setup your account. Once your account is established, you will be able to place orders, receive and return Stage II files, and receive error files securely via the Internet. A presentation of how the Internet fulfillment activity would take place was demonstrated by Bruce Kinser.

The CASS Department will require companies or other users who may be recertifying a product obtained from anyone who holds their own CASS certification to identify the original provider of the software. This will allow the CASS Department to more effectively oversee a software product and its use by other certified users. For MASS-certified systems, CASS will require manufacturers and end-users to report configuration information, including camera configurations.

Platform Certification Policy

Although not discussed during the meeting, the following information is provided to further define the requirements associated with the certification of alternate operating platforms.

A change in the policy was allowed during the 1998 - 1999 cycle that eliminated the requirement for developers to submit to redundant CASS testing of an "operating system family" across all computer platforms and/or versions of the operating system. As an example, developers who were producing a product for the UNIX operating system were not required to perform a CASS test for each flavor of UNIX. This waiver applied as long as the developer performed in-house testing that assured the different flavors of UNIX using the same version of source code were producing the exact same results.

We will continue to allow developers to obtain blanket certification of the same operating system family only if the developer is performing such testing of each operating system as part of their normal quality control function. Developers must provide the CASS Department written documentation which states that the testing produced **zero** differences. CASS tests will continue to be made available at a developer's request for each operating system or computer platform desired.

The CASS Department policy that developers must obtain CASS certification for each operating system they produce will remain in effect. If a developer is in doubt as to whether they must independently certify a product, they should check with the CASS Department for clarification.

Software Updates

Although not discussed at the meeting, the following standard policy is being included as information.

The requirement to use standardized version numbering will be continued. For the 1999 - 2000 cycle, software must increment the cycle field to "D". CASS will continue to require software to report the full version, revision, cycle number, and optional manufacturer information on PS Form 3553. The CASS/MASS Certified Products Guide will show the version number up to the

cycle field value. Postal business mail entry personnel will continue to confirm a product's certification via the Certified Products Guide.

Version Control

Although not discussed as part of the meeting, the following question was posed by one of the attendees. As it appears that there is still confusion related to when a developer is required to resubmit their product for CASS certification, we are restating the policy here for the benefit of all.

Whenever an existing CASS-certified product is modified for any reason, a requirement exists that the developer notify the CASS Department of the modification and to determine if recertification is necessary. The CASS Department recognizes that not all product modifications involve changes to the core functionality of the address matching logic. Changes made to fix a specific problem such as an program abend, or to provide a customer with a specific interface need, will generally not require recertification. However, the CASS Department requires that any and all changes be reported, regardless of their purpose. The CASS Department will review the proposed change and notify the developer whether they must submit for recertification.

Any notice to the CASS Department of a patch or modification will be reviewed and responded to within two business days. If the CASS Department fails to respond within two business days, the developer can presume clearance and release that specific patch or modification. Where this may occur, the CASS Department retains the right to have the developer recertify that specific release to verify continued compliance with CASS requirements.

Developers who are faced with an emergency need to provide a patch to their customer(s) may do so without prior notification and clearance by the CASS Department. However, developers must report these conditions within two business days of the emergency release to the CASS Department. Failure to notify the CASS Department of patches or modifications may result in the decertification of the modified product and the rescinding of any postage discounts obtained with the use of the modified product. As notice, the rescinding of postage discounts may be retroactively applied. Again, the CASS Department retains the right to have the developer recertify that specific release to verify continued compliance with CASS requirements.

A standard form has been developed upon which developers can report the modifications made to their existing CASS-certified products. This form will be made available via the Internet for completion.

3.3 Completion of PS Form 3553

Completion and submission of the PS Form 3553 was established as a requirement to obtain CASS and MASS certification for the 1999 - 2000 CASS cycle. Stage II tests, or MASS test decks, returned without a PS Form 3553, or the equivalent data embedded in the Stage II file header record, will be disqualified and the developer, customer, or system being tested will be required to retest. Further, data returned on the PS Form 3553 must agree with the data returned in the Stage II file or as derived from the mailpieces read during the MASS grading process. A separate attachment documents the correct way to fill out PS Form 3553.

A new format of PS Form 3553 is under development and was presented at the meeting. A copy of the draft PS Form 3553 is provided as an attachment to this document. The draft PS Form 3553 will be implemented for the 1999 - 2000 cycle only if it receives final Postal Service approval by December 15th. If final Postal Service approval is not provided by December 15th, the draft version will not be implemented as a requirement and may not be used.

To accommodate developers who wish to return an electronic version of the PS Form 3553, we have modified the Stage II record format to allow the **new** PS Form 3553 field contents to be returned as part of the header record. This is the only way we will accept electronic PS Form 3553 data. Do not return a separate data file on your media with the PS Form 3553 data embedded as a fixed length record or as a print-image file. We will not accept these files and will disqualify the Stage II test returned.

LOT

The Stage I and Stage II file formats will be modified to include Line of Travel (LOT) information. A LOT/ZIP+4 merge test will be offered as part of the CASS Stage II test. This will allow more streamlined certification and also better reflect the production process when software assigns LOT data as part of the address matching process. The Stage I file will reflect LOT assignments for validation purposes. For more information about LOT, see the section at the end of this document that more fully describes the LOT testing procedures.

Changes in Stage I / II File Layouts and Information

To improve the usefulness of Stage I files, CASS will be implementing changes in the file format that will allow CASS to provide more information about specific questions and their possible answers. Refer to the attachments for a revised file layout and listing of data elements. Further descriptions of Stage I / II file attributes can be found in the CASS Technical Guide.

In past CASS cycles, the answers shown in the Stage I file have been limited to one possible response. Where Stage I questions might produce more than one possible answer, developers had a difficult time deciding if the difference between their answer and a Stage I answer was a problem or not. To help developers evaluate their answers in comparison to Stage I file answers, new fields will be added into the Stage I file to show whether CASS recognizes alternate answers for the question given. It was requested, and considered by the CASS Department, that the Stage I file show every possible answer for the question given. However, this was considered impractical as it forced CASS to anticipate each and every possible answer versus simply recognizing where at least one other answer was possible.

C8.3 - C9.2 Discussion Items

Private Mailbox Designation (PMB)

A new addressing format has been proposed for use by customers of commercial mail receiving agents (CMRAs). CMRAs are companies who offer mail services commercially to customers and are authorized to receive mail on behalf of their customer. The Postal Service has drafted a Federal Register notice that outlines the requirements involving the use of the new address format by customers of commercial mail receiving agents. A copy of this draft proposal is included as an attachment with this document.

To help safeguard mail, a requirement to utilize an additional designator within the address on mail to destined for delivery through a CMRA is proposed to be added to the Domestic Mail Manual. The address will be required to include a separate designation termed "PMB" to represent a private mailbox. This additional PMB address information is required to exist separately from the delivery address of the CMRA. Example:

John Doe = Recipient

PMB 234 = Private mailbox within the CMRA

123 Main St Ste 10 = CMRA delivery address
City ST ZIP + 4 = CMRA last line information

Developers should review the proposed changes and be prepared to accommodate customer addresses bearing this new address information. The Postal Service will not include the PMB information within the ZIP+4 File. Care must be exercised by all certified products to insure that the PMB information is not misinterpreted as PO Box information, or to lose any PMB information associated with the address.

College and University Addressing Issues

The Postal Service is working closely with colleges and universities to help resolve the problems experienced by customers in obtaining matches for college and university addresses. A subcommittee of the Mailers Technical Advisory Committee (MTAC) has been formed to specifically deal with this issue. Another workgroup has been formed within the Postal Service Marketing Department named the "Team of 50". This group of account representatives, one from each state, will act as a liaison between the schools and the Postal Service.

We have held meetings with several schools throughout the country designed to develop better understanding and awareness of the addressing and delivery issues of colleges and universities. We are proposing a set of addressing standards to college and universities that we feel will accommodate most of their needs. We have agreed that with their implementation and utilization of standard addressing formats, we will incorporate their data into our ZIP+4 file. By moving to a standard addressing format that we have recorded in our data file, we can begin to resolve the problems encountered by all involved.

PLANET Code

A discussion of the new PLANET Code barcode was held. The PLANET Code is a modified version of the POSTNET barcode, using 3 tall bars instead of 2 within each 5 bars. This new code will be used by customers to help track their mailings, both incoming and outgoing. A new Postal Service program "CONFIRM", will utilize the PLANET Code on mail to report information to the customer.

Year 2000 Compliance (Y2K)

A discussion was held dealing with the attendees' preparedness to deal with Y2K issues as they relate to their use of Postal Service address information products. A question was posed to the attendees whether they felt it necessary for the Postal Service to issue a special version of the products for use in performing Y2K testing. Only one participant indicated that a special version of the address information products was desirable. Based on the response of the attendees, the Postal Service will not offer any special address information products for use in Y2K testing. Developers are encouraged to produce their own modified versions of the products to perform Y2K testing. Developers who modify address information products for Y2K testing must insure that the customer does not use these products in any live mailing activity.

C9.3 - C10.2 New Grading Requirements

A change in grading for Category W, City Names in Multiple Finance Numbers, and Category Y, Split/Combined Elements, will be made in the 1999 - 2000 cycle. These two categories, which were previously graded as optional answer categories, will be graded as mandatory answer categories. The CASS test will require developers to provide correct answers for questions in these categories. CASS will no longer bypass grading of questions in these categories when they are not answered.

A new subcategory in Category A will be added to the CASS test. The questions in this new subcategory will involve addresses where all of the information is valid, except for a spelling variation within the street name field. The intent of this new subcategory is to test how software handles minor spelling errors in the street name that may cause the address to match erroneously to another record in the same finance number. This new subcategory will be graded as mandatory. See the chapter "Street Name Spelling Variations" within this document for more information on this topic.

The CASS test will include a mandatory subcategory in Category W that will test how software matches similar street names occurring in multiple finance numbers. The intent of this subcategory is to eliminate the tendency of some software products to "jump" finance numbers when looking for matches. For more information, see the "Multi-Finance Number Crossover" section in this document.

The grading requirements for Puerto Rico questions contained in Category 5 will be changed from the current 90% accuracy requirement to the same accuracy requirement as all other categories. Category 5 will now require a 96% accuracy score for ZIP+4, and 98% accuracy score for carrier route and 5-digit ZIP Code assignments. The increase in the accuracy requirement for Category 5 questions is warranted in that the Postal Service has provided 3 years for developers to improve the quality of answers in this category.

CASS will change how multiple response, Category K, questions will be graded. If a question in Category K is answered incorrectly, two errors will be assessed on the erroneous answer. The expected answer for all Category K questions is no-answer. The more stringent grading of Category K questions is needed to force developers to exercise greater care when dealing with addresses that may match to multiple records.

CASS will make a change in how customers who are using a developer's certified product are graded. If a customer answers incorrectly the same CASS or MASS question that the developer answered correctly, the customer will be assessed two errors on the erroneous answer. If a customer returns a better answer on a CASS or MASS question than the developer did, no penalty will be assessed the customer's answer. This change is being made to encourage developers to improve the consistency of answers produced by their products and to require customers to use the products in the manner in which they were designed.

CASS has seen many examples where customers return a different answer on their CASS test than the developer did in their CASS test, for the exact same question. The customer will argue that they are using the product exactly as provided by the developer and are not responsible for the difference in answers. The CASS Department has proven by our internal use of commercial software products, that the differences often result because the products allow access to alternate information fields which customers mistakenly interpret as the valid answer fields. We have also seen examples in live mail where a mailpiece was miscoded for the same reason.

Because the miscoding within the CASS test may not be sufficient to cause a customer to fail, customers have no incentive or reason to correct the error in their use of the product. The CASS Department believes that the imposition of an additional penalty will help to get the customer's attention and cause the customer to make the requisite changes. If this additional penalty assessment does not accomplish this objective, then grading of the customer's CASS test will be changed to cause an immediate failure of any test which does not produce consistent answers.

C10.3 - C13.3 Last Line Requirements

Last-Line-Key Usage

As more localities seek their community identity, they are very aware about how their city name is represented on mail. Further, they expect the Postal Service to honor their city name's usage. The Postal Service has responded by establishing the Preferred-Last-Line-City-State-Key (Last-Line-Key) field on ZIP+4 records. This value shows where a name other than the default city name at the 5-digit ZIP Code level from the City/State File should be used.

To support the correct usage of the locally preferred city name, CASS testing will require that address matching software use the city name associated with the ZIP+4 record in the following conditions:

• When the input city name is shown as a non-mailing name in the ZIP Code where the match will be made:

City/State File

ZIP Code	City-State-Name	Pref-City-State- Name	Mailing Name	Pref-Last- Line-Key	Finance No
38138	GERMANTOWN	GERMANTOWN	Υ	X29760	473495
38138	MEMPHIS	GERMANTOWN	N	X25498	473495

ZIP+4 File

ZIP	Prim	Prim	Pre			Post		Last-Line-Key
Code	Low	High	Dir	Street Name	Suffix	Dir	ZIP+4	·
38138	8800	8850		DARBY DAN	LN		8258	GERMANTOWN

Input: 8802 Darby Dan Ln

Memphis TN 38138

Returned answer: 8802 DARBY DAN LN

GERMANTOWN TN 38138-8258

 When the input address does not contain a city and state but is processed using only an input ZIP Code:

City/State File

ZIP		Pref-City-State-	Mailing	Pref-Last-	Finance
Code	City-State-Name	Name	Name	Line-Key	No
46227	INDIANAPOLIS	INDIANAPOLIS	Υ	X12558	174037
46227	SOUTHPORT	SOUTHPORT	Y	X13631	174037

ZIP+4 File

ZIP Code	Prim Low	Prim High	Pre Dir	Street Name	Suffix	Post Dir	ZIP+4	Last-Line-Key
		_						
46227	2	98	·	WEST	ST		5130	SOUTHPORT

Input: 14 West St

46227

Returned answer: 14 WEST ST

SOUTHPORT IN 46227-5130

• When the input address has a city name but that city name is unrecognizable or cannot be found in the City/State File:

City/State File

,		•			
ZIP		Pref-City-State-	Mailing	Pref-Last-	Finance
Code	City-State-Name	Name	Name	Line-Key	No
32937	INDIAN HARBOR BEACH	SATELLITE BEACH	Y	Y22087	115790
32937	INDIAN HARBOUR BEACH	SATELLITE BEACH	Υ	Y22088	115790
32937	MELBOURNE	SATELLITE BEACH	Υ	Y22370	115790
32937	SATELLITE BEACH	SATELLITE BEACH	Y	Y22961	115790

ZIP+4 File

ZIP	Prim	Prim	Pre			Post		Last-Line-Key
Code	Low	High	Dir	Street Name	Suffix	Dir	ZIP+4	•
32937	201	2999		APACHE	DR		3503	INDIAN HARBOUR BEACH

Input: 201 Apache Dr

Melbrown FL 32937

Returned answer: 201 APACHE DR

INDIAN HARBOUR BEACH FL 32937-3503

C14.1 - C15.1 City Name Abbreviations

Questions will be added to the CASS test that have a word or words abbreviated within the city name contained in the last line information. The abbreviation of the city name may or may not be reflected within the City/State File. Any word contained within the city name that includes a standard directional or suffix value is a candidate for presentation in either a fully spelled out or in an abbreviated format. Developers must be capable of recognizing common variations of these words and be able to substitute the appropriate format to correctly match to the City/State File

We have seen many instances within live mail where a mailpiece was misdirected because the city name was incorrectly matched due to the presentation format. We have also seen many examples where an input address is not matched because of the city name was not recognized due to presentation format. This error occurs even when an input ZIP Code may be present due to city name preference logic. For example, assume the following data exists within the City/State File:

ZIP Code	Name(s) found in City/State File
70051	MOUNT AIRY
70001	METAIRIE
11581	VALLEY STREAM

If the following information is processed, the potential results are:

Input	Possible actions by software
Mt Airy	No match to MOUNT AIRY
	Miscode to METAIRIE
Vly Strm	No match to VALLEY STREAM

As shown above, a non-standard city name input can greatly affect the quality of the returned match. Where the city name is similar to something else, it may generate a miscode and send mail anywhere within the state. Where the city name cannot be recognized, an opportunity to match the input address can be lost. If the input address contained a ZIP Code, software may make a correct match based on the ZIP Code and not realize that the customer's input city name was a representation of an acceptable mailing name. This may cause software to return a different city name which may cause customer dissatisfaction.

To reduce the potential for miscoding, and to enhance the potential for matching and retaining valid mailing names, developers will be required to recognize city names that may have an abbreviated format. The CASS test will vary city names with suffix and/or directional words to their alternate format. These are the only variations that CASS will test for in the 1999 - 2000 cycle. For example,

City Name:	CASS Presentation:
PALM SPRINGS FL 33461	Palm Spgs FL 33461

LK FOREST FL 32771

The CASS Department encourages developers to include other common words that are routinely presented in abbreviated or spelled out presentations such as "Saint / ST", "University / Univ", etc..

C15.2 - C17.3 Multi-Finance Number Matching

With the increasing frequency of the same city name occurring in more than one finance number, the potential for miscoding escalates. The miscoding may be compounded when the output address looks nothing like the input address, with potentially a new street name and a new city name contained in the returned answer. If this level of change in address occurs, there is no way that the original address can ever be reconstructed nor any way to thread together how the match actually took place.

To reduce the potential for this type of miscoding from occurring, a new policy to limit matches involving city names in multiple finance numbers is being adopted. This new policy states that software must restrict searches to only those ZIP Codes associated with the input city name if the input city name exists in multiple finance numbers and there wasn't a ZIP Code present on the input address. Software must not expand its search outside of the ZIP Codes associated with the input city name to match a record in a ZIP Code not shown within the City/State File as being associated the input city name. It does not matter whether the input city name is identified as a mailing or non-mailing name. For example, assume the following information is present within the City/State and ZIP+4 files:

City/State File

<u> </u>					
ZIP	City-State-Name	Mailing- Name-	Preferred-Last-	Finance	State
Code	_	Indicator	Line	Number	
60521	BURR RIDGE	Υ	HINSDALE	163654	IL
60523	HINSDALE	Υ	OAKBROOK	163654	IL
60525	BURR RIDGE	Υ	LA GRANGE	164230	IL

ZIP+4 File

ZIP	Prim	Prim	Pre			Post		Finance	Last-Line-Key
Code	Low	High	Dir	Street Name	Suffix	Dir	ZIP+4	Number	-
60523	1300	1312		KENSINGTON	RD		2107	163654	OAK BROOK

If the input address is:

1302 Kensington Rd Burr Ridge IL

it cannot be matched since the only match available would be to a ZIP Code that "Burr Ridge" is not associated with. Questions that test this scenario will be added to Category W.

Multi-Finance Number Crossover

A mandatory answer subcategory will be incorporated into Category W to test conditions where the input street name is a closer match to a record in another finance number than it is to a record within the finance number associated with the input last line. Software must not match outside of the finance number associated with the input address, unless directed by either the ZIPMove or Zone Split products, simply because a better match on the street components exist in a different finance number. For example:

ZIP	Prim	Prim	Pre			Post		Finance	Last-Line-Key
Code	Low	High	Dir	Street Name	Suffix	Dir	ZIP+4	Number	
60010	2	16		DEERPATH	RD		3704	160480	DEER PARK IL
60102	2	98		DEER	PATH		1219	160096	LAKE IN THE
									HILLS IL

If the input address is: 4 Deer Path

Deer Park IL 60010

it is incorrect to match as: 4 DEER PATH

LAKE IN THE HILLS IL 60102-1219

City/State and ZIP Code in Different Finance Numbers

Sometimes customers present addresses that have a city/state that is associated with one finance number and a ZIP Code that is associated with a different finance number. This can easily result from data entry errors, where one miskey of the ZIP Code can mean a significant change. When software attempts to match the address, it must give preference to the input city name and search the finance number associated with the input city name. If it does not find a match in the finance number of the input city name, software may optionally search the finance number of the ZIP Code if the input state and ZIP Code agree.

To minimize the possibility for erroneous matching, a new CASS requirement will be implemented that limits matches to the input ZIP Code when this type of error is encountered. If software cannot find a match using the input city name, it cannot select a match that changes the input ZIP Code. Where the input city/state and ZIP Code are in finance numbers from different states, software must not make a match within the finance number of the ZIP Code, regardless of whether or not a match exists within the input ZIP Code. For example, assume the following data is present in the City/State and ZIP+4 files:

City/State File

ZIP		Finance	State
Code	City-State-Name	Number	
94080	SOUTH SAN FRANCISCO	057416	CA
Many	SAN FRANCISCO	056786	CA

ZIP+4 File

ZIP	Prim	Prim	Pre			Post		Finance	Last-Line-Key
Code	Low	High	Dir	Street Name	Suffix	Dir	ZIP+4	Number	,
94080	200	270		OYSTER	BLVD		1911	057416	SOUTH SAN
				POINT					FRANCISCO

Input address: 210 Oyster Point Blvd San Francisco CA 94080

Within "San Francisco, CA" the input address would not match. Software may optionally search for a match in ZIP Code "94080". Since a match exists that does not change the input ZIP Code, software may assign:

Allowed match: 210 OYSTER POINT BLVD

SOUTH SAN FRANCISCO CA 94080-1911

If, however, the ZIP Code would have been changed, the match could not be made. For example,

City/State File

		<u>.</u>	
ZIP		Finance	State
Code	City-State-Name	Number	
94010	BURLINGAME	057416	CA
94101	SAN FRANCISCO	056786	CA
94121	SAN FRANCISCO	056786	CA

ZIP+4 File

ZIP	Prim	Prim	Pre			Post		Finance	Last-Line-Key
Code	Low	High	Dir	Street Name	Suffix	Dir	ZIP+4	Number	·
94010	>	1699		BALBOA	AVE		MANY	057416	BURLINGAME
94121	1700	1798		BALBOA	ST		3129	056786	SAN FRANCISCO

Input address: 1724 Balboa Ave

Burlingame CA 94101

Since the input ZIP Code of "94101" would have to be changed to match to the ZIP+4 record in "San Francisco CA 94121", the match is not allowed.

The CASS test will include questions that present the a last line with a city name from one finance number and a ZIP Code from another finance number as an optional subcategory in Category W. Where software makes an assignment, it must comply with the policy stated above. If software chooses not to make an assignment, the question will be bypassed in grading.

C18.1 - C18.3 Street Name Spelling Variations

There are many street names in "post offices" throughout this country that are very similar to other street names within the same "post office". The term post office means a geographic area served out of the same postal facility. A post office generally encompasses an entire city or cities, and services many ZIP Codes. The boundary of a post office can be defined by its finance number, which is included in all of the Postal Service street level address information products.

As address matching software has developed, the finance number has been used by developers to limit the scope of their search activity when looking for a possible match. When looking for a match in San Francisco, CA, it wouldn't help to search in Los Angeles, CA. Because the finance number can cover multiple ZIP Codes or cities, it may sometimes lead developers astray when they search for matches.

Developers will routinely search a finance number to find a match that produces agreement between the input street name and a street name within the ZIP+4 File. Recognizing that customers may have street name spelling errors in their address records, depending too heavily on matches solely between the input street name and the street name in the ZIP+4 File may produce erroneous matches. For example, the two records shown below both occur in the same finance number.

ZIP	Prim	Prim	Pre			Post		Last-Line-Key
Code	Low	High	Dir	Street Name	Suffix	Dir	ZIP+4	•
02131	351	415		BEECH	ST		4401	ROSLINDALE
02151	389	475		BEACH	ST		5929	REVERE

By matching solely on the street name, if an input address contains a minor misspelling of the street name, the last line of the address can be changed entirely.

Example:

Input address: 401 BEACH ST

ROSLINDALE MA 02131

Incorrect assignment: 401 BEACH ST

REVERE MA 02151-5929

Correct assignment: 401 BEECH ST

ROSLINDALE MA 02131-4401

In the example, if the match is derived based entirely on finding the ZIP+4 record that matches the input street name exactly, an erroneous match will occur. Obviously, changing the street name spelling in this case is preferable over changing the city name and ZIP Code. Software developers must take into account the changes that would result to the last line information. Where a match will result in a change in city and ZIP Code, developers must consider lesser quality street name matches that would not require a change in these components.

The CASS test will be modified in the 1999 - 2000 cycle to include a new subcategory within Category A. Questions that contain minor street name misspellings with a valid city name and

ZIP Code will be presented where a match to the same street name in another ZIP Code is possible. The potential match may or may not require a change to the input city name. The subcategory will be graded as mandatory. Developers must correct the street name misspelling and assign to the ZIP+4 record within the input ZIP Code.

C19.1 - C20.1 Overweighted Street Component Matching

This topic is very similar to the previous topic involving street name misspellings. If an input address contains an incorrect directional of suffix, it may result in the input address matching to a record in another city and/or ZIP Code where the directional or suffix agrees.

ZIP	Prim	Prim	Pre			Post		Last-Line-Key
Code	Low	High	Dir	Street Name	Suffix	Dir	ZIP+4	
32233	100	198		BEACH	AVE		5213	ATLANTIC BEACH
32250	100	198		BEACH	BLVD		6815	JACKSONVILLE BEACH

If a customer makes a minor error in the address, it can cause a serious miscode and result in delivery problems. For example:

Input address: 100 Beach Blvd

Atlantic Beach FL 32233

Incorrect match: 100 BEACH BLVD

JACKSONVILLE BEACH FL 32250-6815

Correct match: 100 BEACH AVE

ATLANTIC BEACH FL 32233-5213

What further complicates this problem is that once a customer's address is miscoded, it cannot be fixed without manual intervention. The customer is burdened to contact his or her mailers to get the miscoded address changed back to the correct address.

Within the 1999 - 2000 CASS cycle, new test questions will be included in the existing subcategories B, C, D, and E. These questions will present addresses where the directional or suffix values have been changed or deleted that cause the input address to match into another ZIP Code. Developers must evaluate matches residing within the input city and ZIP Code and select matches within those where they are available before selecting matches outside of the input city and ZIP Code.

The evaluation process for determining how far to go in picking near-matches within the input city and ZIP Code would be the same as what normally takes place in selecting any match. If the exact-match record from the other ZIP Code was not present, and the near-match in the same ZIP Code met the standards for selection, it should be selected.

ZIPMove and Zone Split Products

Developers may wish to consider use of the Postal Service ZIPMove File and Zone Split records from the City/State File in accomplishing the two previous topics. These two products provide direct instructions related to ZIP Code changes. Use of these products is not a CASS requirement. Implementing these products into software and hardware systems will help resolve those cases where the proper action for matching an address would involve changing the input ZIP Code to another ZIP Code. For example, assume that the following two records originally existed in the same 5-digit ZIP Code.

ZIP	Prim	Prim	Pre			Post		Last-Line-
Code	Low	High	Dir	Street Name	Suffix	Dir	ZIP+4	Key
98991	101	199		MAIN	AVE		1234	V11111
98991	101	199		MAIN	BLVD		1235	V22222

Now, assume that the second record "MAIN BLVD" was moved to ZIP Code 98992. When a customer address is presented for "MAIN BLVD" with ZIP Code "98991", and following the logic required by the previous two topics, the address would be corrected to "MAIN AVE" and remain in ZIP Code 98991. By using the Zone Split data, developers could quickly determine the fact that ZIP Code 98991 had a territory realignment and that some of the streets moved into ZIP Code 98992. Using the intelligence gained from this data, matching "MAIN BLVD" to ZIP Code 98992 would be a valid action.

The Zone Split data can be extremely helpful in matching addresses after a territory realignment. For example, the Postal Service recently realigned territory in Boston, Massachusetts. During this realignment, addresses were moved from the 3-digit area (021) into the 3-digit area (024). A decrease in commercial system ZIP+4 coding has resulted due to the fact that address matching products have not been able to thread from the old ZIP Codes into the new ZIP Codes. For example, the following data use to reside on the City/State and ZIP+4 File within the Boston finance number.

City/State File

ZIP Code	City-State-Name	City- State-Key	Mailing Name	Pref-City-State-Name	Pref-Last- Line-Key
02181	WELLESLEY HILLS	V22789	Υ	WELLESLEY	V22736
02181	WELLESLEY	V22736	Υ	WELLESLEY	V22736

ZIP+4 File

ZIP	Prim	Prim	Pre			Post		Last-Line-Key
Code	Low	High	Dir	Street Name	Suffix	Dir	ZIP+4	-
02181	2	100		WALNUT	ST		2102	WELLESLEY

Prior to the realignment, the following address would have been valid:

70 Walnut St Wellesley Hills MA 02181-2102

The Zone Split data shows that all of the streets in ZIP Code 02181 were moved to ZIP Code 02481. The City/State and ZIP+4 File data now show as this:

City/State File

Oity/ Otato !					
ZIP		City-	Mailing	Pref-City-State-Name	Pref-Last-
Code	City-State-Name	State-Key	Name		Line-Key
02181	WELLESLEY HILLS	V22789	Υ	WELLESLEY	V22736
02181	WELLESLEY	V22736	Υ	WELLESLEY	V22736
02481	WELLESLEY HILLS	V22789	Υ	WELLESLEY	V22736
02181	WELLESLEY	V22736	Υ	WELLESLEY	V22736

ZIP+4 File

ZIP	Prim	Prim	Pre			Post		Last-Line-Key
Code	Low	High	Dir	Street Name	Suffix	Dir	ZIP+4	
02481	2	100		WALNUT	ST		2102	WELLESLEY

When the above address is reprocessed using current data, software which does not use the Zone Split data may not be able to code this address since "Walnut St" exists in multiple ZIP Codes within the finance number. Last-line logic, selecting the record with the same city-state-key as the input city, doesn't break the tie because the city-state-key for "Wellesley Hills" does not exist on any of the ZIP+4 records. This record may remain uncodeable if software does not use the Zone Split data to recognize that the ZIP Code should be changed from 02181 to 02481. Changing the ZIP Code to 02481 would allow software to break the tie and select the record that matches to ZIP Code 02481.

C20.2 - C20.3 High-rise Delivery Point Coding Rule Modification

In the 1998 - 1999 CASS cycle, an instruction was given to developers on how to assign the delivery point values in cases where there was no high-rise default record contained within the ZIP+4 File. This occurred most often when there was a single high-rise record associated with the primary address. For example:

ZIP+4 File

ZIP Code	Rec Type	Prim Low	Prim High	Pre Dir	Street Name	Suffix	Post Dir	Seco Low	Seco High	ZIP+4
	7.									
38134	S	2700	2798		BARTLETT	BLVD				4530
38134	Н	2758	2758		BARTLETT	BLVD		201	210	4500

The previous CASS policy directive was to assign the high-rise ZIP+4 Code even though the input secondary number was not within the range of the secondary values. A delivery point value of "99" was required in this case. Developers are now instructed to assign the street record ZIP+4 code for those addresses where the street name and primary number matches to a high-rise record but the secondary number is out-of-range and cannot be assigned to a high-rise default record. The delivery point value will be based upon the primary address value since the match is made to a street record.

Example:

Input address: 2758 Bartlett Blvd Ste 212

Bartlett TN 38134

Current match: 2758 BARTLETT BLVD STE 212

BARTLETT TN 38134-4500(99)

Revised match: 2758 BARTLETT BLVD STE 212

BARTLETT TN 38134-4530(58)

This new policy only applies when no high-rise-default record is present within the ZIP+4 File. If a high-rise default record is present, developers must continue to match the high-rise default record when the input secondary is missing or out-of-range. The delivery point value will remain "99" on matches to high-rise default records.

C21.1 - C26.1 Unique ZIP Code Logic Changes

A change in policy for the matching of addresses containing a unique ZIP Code will be implemented and tested within the 1999 - 2000 cycle. Category 4, which was removed from the CASS test during the 1998 - 1999 cycle will be reinstated.

In previous address matching policy, developers were told to look for potential matches outside the unique ZIP Code in certain cases. This policy was intended to correct ZIP Codes in situations where the customer's use of a unique ZIP Code in their address was incorrect. The effect of this previous policy was a significant increase in miscoded mail, with little benefit in accomplishing then intended corrections. As a result of feedback from field operations, this policy is being changed.

When an input address contains a unique ZIP Code, developers must check whether or not the input city name corresponds with the unique ZIP Code. The term "corresponds" is defined as showing within the City/State File as an entry associated with that specific ZIP Code. It does not matter whether the input city name is shown as a non-mailing name or not. If the input city name is found in the City/State File and is associated with the unique ZIP Code, it is considered to correspond. If the input city name is not shown as an entry associated with the unique ZIP Code, it does not correspond.

Example:

City/State File

ZIP		ZIP-Classification-	Mailing
Code	City-State-Name	Code	Name
38188	NATIONAL CUSTOMER SUPPORT CTR	U	N
38188	MEMPHIS	U	Υ
70143	BELLE CHASE NAS	U	N
70143	NAVAL AIR STA N O	U	N
70143	NEW ORLEANS	U	Υ
70146	NEW ORLEANS NAVAL AIR		N

Input city name and ZIP Code:	<u>Corresponds</u> :
National Customer Support Center TN 38188	Υ
Belle Chase NAS LA 70143	Υ
New Orleans LA 70143	Υ
New Orleans Naval Air LA 70143	N

The last record does not correspond since the only ZIP Code "New Orleans Naval Air" is associated with is ZIP Code 70146.

When an input city name corresponds with the unique ZIP Code in the City/State File, software must search within the unique ZIP Code for a match. If a match can be found, software should assign the appropriate ZIP+4 Code from the matching record unless a valid ZIP+4 Code was present in the input address. If a valid ZIP+4 Code, defined as a ZIP+4 Code that exists in the

ZIP+4 File, is present in the input address it must be retained. The input city name may or may not be changed, based on whether it is an acceptable mailing name for that ZIP Code.

When an input city name does not correspond with the unique ZIP Code, software should proceed as if the input ZIP Code was not present. A search based on the city name should take place and the output city name and ZIP Code based on the match found. If a match is not made using the city name, software must not return the input unique ZIP Code on the output. Software may assign and output a ZIP Code for cities with a single ZIP Code when the input address cannot be matched to the ZIP+4 File.

Software must not code an input address without a ZIP Code or with a non-unique ZIP Code to a record in a unique ZIP Code unless a match to a firm record is made in the unique ZIP Code. This restriction is to minimize situations where a "close-match" to a record in the unique ZIP Code is better than the correct match outside of the unique ZIP Code. By limiting these matches to firm records, agreement between the input and the ZIP+4 record firm name will reduce the chance of error.

Software must never change a unique ZIP Code and assign a non-unique ZIP Code when the input address is a PO Box address and the city name corresponds. If the city name does not correspond, software should proceed to correct or delete the unique ZIP Code as previously described, even if the input contains a PO Box address. Software must exercise extreme care in handling addresses containing the word "Box". Be certain that it is not misinterpreted as a PO Box address when "Box" is used in another context within the address.

C26.2 - C26.3 Keyword Street Name Matching

The logic that was introduced at the 1998 - 1999 CASS meeting dealing with matching of addresses containing certain highway designators will not be implemented in the 1999 - 2000 cycle. As a result further analysis of the Category 3 questions that have been asked on previous CASS cycles, the decision to remove Category 3 questions has been made. Within the 1999 - 2000 cycle, Category 3 questions will not be included.

An effort to review the accuracy of matches involving highway designator addresses, e.g. 123 US Highway 1 matching to 123 State Highway 1, is being conducted within the Address Element Correction (AEC) program. Pending the results of this analysis, Category 3 questions may be reintroduced at a later time with modified policy instructions.

C27.1 - C27.3 Matching Addresses Containing Dual Address Information

In past CASS cycles, a policy was implemented that defined how software must perform matching when the input address contained a dual address format. A dual address format exists when the address contains more than one address. This format could include two addresses within the same field or line, or when the addresses were contained in separate fields or lines. For example:

The Postal Service is considering a policy which would always match to the PO Box address when these formats are encountered. As this is different from our current policy in CASS, we would have to change our CASS testing procedures to reflect this new policy, once it is finalized. If we obtain finalized policy by December 15th, we will reflect the new requirements by reinstating Category F. If we do not receive finalized policy before December 15th, we will not test this functionality in the 1999 - 2000 cycle.

Developers are encouraged to evaluate the impact this change may have and be ready to implement this policy if it is adopted. Until this policy is adopted, there is no requirement to modify current logic, regardless of how it is presently operating.

C28.1 - C29.1 Multiple Parse Street Name Variations

Due to how software may implement parsing logic, certain input addresses that do not contain all elements may end up matching incorrectly to a different street with a similar pattern. As an example:

7IP+4 File

ZIP	Prim	Prim	Pre			Post		Last-
Code	Low	High	Dir	Street Name	Suffix	Dir	ZIP+4	Line-Key
46220	5400	5498		FALL CREEK	RD		5055	X12558
46226	5400	5498	Е	FALL CREEK	DR		1463	X12558
				PARKWAY NORTH				

If an input address of: 5404 Fall Creek Parkway North Indianapolis IN 46226

is processed, then differing matches may result depending on how software parses the address. If "North" is parsed as a post-directional and "Parkway" is parsed as a suffix, leaving "Fall Creek" as the street name, software may match the wrong record of "FALL CREEK RD".

Addresses representing conditions of this type will be added into the CASS test as a mandatory category. All possible variations on parsing may be included within the CASS test. This includes candidate questions where assistance may be obtained from an alias record and where no alias record is provided.

C29.2 - C31.2 Multi-Field Addresses

Within the 1999 - 2000 CASS cycle, address questions will be presented that have delivery information which spans multiple fields or lines. Many customer address files contain more than one delivery address line. To correctly assign postal codes, software would have to process both fields together to achieve the correct assignment or proper depth-of-code assignment.

To motivate developers to provide the capability within their products to handle multiple delivery address fields, the CASS test will begin testing this functionality with optional grading. If software correctly combines the two delivery address fields and assigns the correct postal codes, the question will be graded correct. If software is unable to combine the two delivery fields and assigns postal codes based on one of the fields, they will be graded correct based on the single field assignment. If software elects to bypass the question, it will not be graded. If software incorrectly assigns postal codes, the question will be graded as a wrong answer.

Example:

<u>Grade</u>
Correct
Incorrect
Correct
Incorrect
Bypass

The CASS Stage II file will not intermix other address information such as firm names or urbanization names into the delivery address fields. The delivery address fields may however be structured with delivery information in either of the two fields. For example, one field may contain an apartment number with the other field containing the street address information, or vice-versa. Another condition may involve one field containing a portion of an address with the other portion in the other address field. Each field may resolve in a postal code assignment when processed separately.

Although the grading of this category will be optional in the 1999 - 2000 CASS cycle, developers are strongly encouraged to implement multi-field address capability in their products. This category will be changed to mandatory in future CASS cycles.

C31.3 - C33.1 Magnet Street Syndrome

There is an increasing amount of miscoding occurring involving what has been termed the "magnet street syndrome". This term refers to the situation where software is making an incorrect determination of the input primary street name and because of the organization of the ZIP+4 data is finding a match that is incorrect. As an example, with the following data and input address:

ZIP+4 File

ZIP Code	Prim Low	Prim High	Pre Dir	Street Name	Suffix	Post Dir	ZIP+4	Last-Line- Key
61081	1700	1798		AVENUE		Е	1124	W15165
61081	1700	1798		AVENUE F			1129	W15165

If an input address of: 1704 Avenue #F Sterling IL 61081

is processed by software, the match is made incorrectly to the "AVENUE E" record based on agreement between what is determined to be the input street name ("AVENUE") and the street name on the ZIP+4 File for the "AVENUE E" record. The customer input has influenced how the software parses the address by the presence of the "#" which causes the "F" to be treated as a secondary unit number. However, this is not always what causes the problem. In MLOCR based matching, the ability of the system to recognize the "F" impacts how it is classified and processed. Further, computer based matching can incorrectly classify characters that result in miscoding. As an example, with the following data and input address:

ZIP+4 File

ZIP Code	Prim Low	Prim High	Pre Dir	Street Name	Suffix	Post Dir	ZIP+4	Last-Line- Key
90008	4000	4098		WEST	BLVD		3102	Z21805
90065	4000	4098	W	AVENUE 40			3703	Z21805

If an input address of: 4002 West Avenue 40 Los Angeles CA 90065

or a variation in the presentation of the above address is processed, software may classify the characters "40" as a secondary unit number. If this happens, the resulting parse would make "AVENUE" into a suffix and "WEST" into the street name. This could result in software matching to "WEST BLVD" in another ZIP Code, based on agreement between the input street name and the ZIP+4 File street name.

To help minimize the problem that results from "magnet street syndrome", CASS has established the following requirement that will be tested as a required answer condition:

"Whenever an input address has a single suffix word or a single directional word as the street name, or whenever the ZIP+4 File records being matched to have a single suffix word or a single directional word as the street name field, then an exact match between the input suffix and/or post-directional and the same components on the ZIP+4 File must occur before a match can be made. Adding, changing or deleting a component from the input address to obtain a match to a ZIP+4 record will be considered incorrect."

To further clarify this requirement, in the first example a match could not be made since the ZIP+4 record matched to, "AVENUE E", does not have agreement between the input post-

directional, which is not present, and the ZIP+4 record. In the second example, there is no agreement between the input suffix "AVE" and the ZIP+4 record suffix "BLVD".

For Puerto Rico addresses, street names on the ZIP+4 file containing the single suffix word "CALLE" or "AVENIDA" will require the same treatment as described above, the suffix and post-directional values must agree on matches between the input address and the ZIP+4 record.

Trailing Numeric in the Street Name

When a primary street name contains both a descriptive word and a numeric value or an alphanumeric value, miscoding can result depending on how software identifies and parses and identifies the individual components. For example, with the following data on the ZIP+4 File:

ZIP+4 File

ZIP Code	Prim Low	Prim High	Pre Dir	Street Name	Suffix	Post Dir	ZIP+4	Last- Line-Kev
33411	103	105		OXFORD	СТ		1535	Y22811
33417	100	199		OXFORD 100			1411	Y23234

and an input address of: 103 Oxford 100

West Palm Beach FL 33417

software may miscode to "OXFORD CT" if the value "100" in the input address is treated as a secondary unit number. Another example with an alphanumeric in the street name is:

ZIP+4 File

ZIP Code	Prim Low	Prim High	Pre Dir	Street Name	Suffix	Post Dir	ZIP+4	Last-Line- Key
93535	401	499	Е	AVENUE J			3745	Z21684
93535	401	499	Е	AVENUE J9			4076	Z21684

If an input address of : 403 Avenue J 9
Lancaster CA 93535

is processed, software may treat the character "9" as a secondary unit number and return a match of "AVENUE J" for ZIP+4 Code "3745".

CASS will test the above conditions as required answer questions. Software will be required to match addresses without an explicit secondary designator value (e.g., "#", "APT"), where the match can be made to the primary street name. CASS will include questions where a space may be inserted between the alphanumeric component, as shown in the above example.

C33.2 - C34.1 Normalized Street Processing

Many customers have address fields that are too short to contain fully spelled out or standardized versions of an address. To accommodate their short field lengths, they often abbreviate address components. Publication 28 issued by the Postal Service gives recommendations on abbreviation and truncation methods that customers should follow when they must compress the address length to fit within a field of less than the optimum length.

CASS encourages developers to provide support for Publication 28 guidelines and be able to convert abbreviated formats that follow the published methods back to their original format to assure proper matching. CASS will add test questions as an optional-response category that reflect addresses that are abbreviated or normalized according to Publication 28 guidelines.

C34.2 - C35.2 Calculating Delivery Points for Military, RR, and HC Default Matches

The policy on delivery point calculations in cases where a match to a military, rural route, and highway contract default record has been revised. In previous CASS cycles, the policy which covered this activity was inconsistent and not clearly defined. The previous CASS grading procedures allowed the delivery point value to be based on the input box number or to be defaulted to a "99" value. This resulted in cases where one product assigned a delivery point value of 99 while another computed the delivery point value based on the box number. In cases where a delivery point utility assigns the delivery point value, it has no way of knowing whether the ZIP+4 Code represents a default or non-default match. Consequently, the delivery point utility would always compute the delivery point value based on the box number.

To eliminate confusion and to standardize the policy, the CASS grading procedures will be modified to require delivery point values to be assigned based on the input box number when it is present. When no input box number is present, the delivery point value is to be defaulted to a "99" value.

C35.3 - C36.3 High-rise Default Alternate Processing

There continues to be a lot of confusion about how to handle addresses that are candidates for highrise building default alternate processing. These are the situations where a customer uses their secondary unit number and the building name to form a prestige address.

In the 1997 - 1998 cycle, developers were instructed on how to recognize records within the ZIP+4 File. Specifically, a high-rise building default record is an "H" record type, is flagged as an "A" in the base-alternate field, has no primary or secondary range values, and has the same ZIP+4 code as the high-rise default record. The contents of the street information fields contain the building name(s) that might be used by a customer as their street name. For example, assume the following data was provided in the ZIP+4 File.

ZIP+4 File

ZIP Code	Prim Low	Prim High	Pre Dir	Street Name	Suffix	Post Dir	Seco Low	Seco High	ZIP+4	Rec Type	Base -Alt Flag
29928	22	22		NEW ORLEANS	RD				4727	Н	В
29928				BRIGHT OHARE BUILDING					4727	Н	А
29928	22	22		NEW ORLEANS	RD		1	6	4799	Н	В
29928	1	6		BRIGHT OHARE BUILDING					4799	Н	GA

The second record instructs developers to be prepared to process an address of:

3 Bright Ohare Building Hilton Head Island SC 29928

and match it and return it as:

22 NEW ORLEANS RD # 3 HILTON HEAD SC 29928-4799

The presence of the second record tells developers that they should be ready to logically, or physically, substitute all secondary ranges associated with "22 NEW ORLEANS RD" as primary ranges associated with "BRIGHT OHARE BUILDING". This substitution is shown by the last record, italicized to reflect that it is not provided within the ZIP+4 File but is either physically or logically created, and described as a "Generated Alternate (GA)" record. When a match is made to the " 1 - 6 BRIGHT OHARE BUILDING" GA record, software knows it must return the street address associated with base record as shown above.

A problem has been seen where software is misinterpreting other alternate records that may be coded within the ZIP+4 File by Address Management offices to help get mail coded correctly. As an example, **if** the following record was provided in the ZIP+4 File in addition to the above data:

it would not be considered as a high-rise building default alternate record and would not be subject to the processing described above. With an input address of:

8 BRIGHT OHARE BUILDING HILTON HEAD ISLAND SC 29928

the expected answer would be: 8 BRIGHT OHARE BUILDING

HILTON HEAD ISLAND SC 29928-4799

and not: 22 NEW ORLEANS RD # 8

HILTON HEAD SC 29928-4799

The above example is not included within the high-rise building default alternate logical processing. It is a standalone delivery point alternate record and not one of the records that the ZIP+4 File indicates upon which a substitution should be performed, since there is no base record that has the secondary range that included the value "8". It would not be changed on the output to "NEW ORLEANS RD".

In many cases, Address Management offices have "over-coded" the ZIP+4 File with many variations of alternate records. This has tended to confuse developers with the presence of many possible match candidates. To help developers when such over-coding is determined, a preference order has been established to indicate how to select a match. The order of preference selection is, assuming **all else** being equal:

- 1. Base record
- 2. Alias record (when present)
- 3. High-rise building default alternate record (when present)
- 4. Delivery point alternate (when present)

Other problems seen with address matching software processing of high-rise building default alternate records is a tendency to choose a base record with a different suffix or directional because of misapplication of logic preferring a base record match over an alternate record match. For example, with the following data on the ZIP+4 File:

ZIP+4 File

ZIP Code	Prim Low	Prim High	Pre Dir	Street Name	Suffix	Post Dir	Seco Low	Seco High	Seco Name	ZIP+4	Rec Type	Base -Alt Flag
29926	101	199		MATHEWS	DR					3604	S	В
29926	1	1		MATHEWS	DR				MATHEWS POINT NORTH	3746	Н	В
29926				MATHEWS	PT	N			MATHEWS POINT NORTH	3746	Н	Α
29926	1	1		MATHEWS	DR		103	108	MATHEWS POINT NORTH	3765	Н	В

If the input address is: 107 Mathews Point N

Hilton Head SC 29926

then the correct match and response is: 1 MATHEWS DR STE 107
HILTON HEAD SC 29926-3765

and not: 107 MATHEWS DR

HILTON HEAD SC 29926-3604

Software should not ignore high-rise building default records when the input matches to these records exactly and choose a near match to another record. The 1999 - 2000 CASS test will reflect questions involving all of the above issues as non-optional questions.

C37.1 - C41.2 Puerto Rico Coding Issues

CASS will continue to test for accurate coding of Puerto Rico style addresses. Several new requirements will be introduced in the 1999 - 2000 cycle that will be graded as a non-optional category.

Matching Using the Urbanization Value as Tiebreaker

The CASS Department has clarified a previous situation where developers were instructed not to make a match in the situation where an input address did not contain an urbanization and there were two candidate ZIP+4 records, one with an urbanization and another one without. The previous CASS instruction was for developers to treat this situation as a multiple response condition. The reason for this previous instruction was a concern that the input address' lack of an urbanization was due to how an address file was organized, and not because the input address really didn't have an urbanization. Where an address file did not provide a field to store an urbanization, the absence of an urbanization from the input address could have been the result of this data file inadequacy and not because the address did not require an urbanization.

Following discussions with Puerto Rico postal personnel, the decision was made to allow software to break ties in multiple response cases where one of the ZIP+4 records had an urbanization and the other one does not, based on whether or not the input address had an urbanization. For example, with the following data:

ZIP+4 File

ZIP Code	Prim Low	Prim High	Pre Dir	Street Name	Suffix	Post Dir	ZIP+4	Last-Line- Key	Urb-Key
00603	100	105		CALLE B			5540	V17137	V17325
00603	100	101		CALLE B			6116	V17137	V17321
00603	101	101		CALLE B			1103	V17137	

and an input address of: 101 Calle B

Aguadilla PR 00603

developers may now assign the ZIP+4 Code associated with the record that has no urbanization key (1103) since there was no urbanization present in the input address. CASS will not require software to make this assignment and will accept a no-answer as a valid response. However, any other assignment other than the correct one will be graded incorrect.

In the case where an input address contains a non-blank urbanization field, but the data is not recognizable as an urbanization, CASS will require that software not match to the ZIP+4 record with the blank urbanization and instead return a no-match. For example, with the above data and the following address with the first line identified as the urbanization field:

Cond Alta Vista 1010 Calle B Aguadilla PR 00603

software may not match to the ZIP+4 record with the blank urbanization under the assumption that since the input urbanization does not agree with the urbanization on the first two records that the only remaining candidate must be the correct choice. This will be tested in CASS as a non-optional category.

Retention of Input Urbanization Values

In all cases where a non-blank urbanization is present within the input address, software must retain the input urbanization unless a single ZIP+4 candidate record is matched to that contains an urbanization. For example, with the following data:

ZIP+4 File

ZIP Code	Prim Low	Prim High	Pre Dir	Street Name	Suffix	Post Dir	ZIP+4	Last-Line- Key	Urb- Key
00949	2026	2037		PASEO			4255	V17286	
				AZALEA					

and input address of: Vista Verde

2402 Paseo Azalea Toa Baja PR 00949

where the first line of the address is identified as the urbanization field, software must not delete string "Vista Verde" because the address record matched does not show an urbanization-key. If the candidate record matched to had an urbanization key, then "Vista Verde" would be replaced by the appropriate urbanization name.

Common Spanish Abbreviations

CASS will test software's ability to match addresses containing common Spanish abbreviations as an optional category. Questions will be presented that abbreviate common words that are frequently used in addresses. The below table shows the abbreviations that will be used within the CASS test.

Santa	Sta
Francisco	FCO
Fernandez	FDZ
Calle	"C." or "C/"

Other examples of where Spanish word conversion will be tested is with addresses that involve the following special secondary designators. Software will be expected to recognize these values in their Spanish format and convert them to their English equivalent.

BAJO	LOWER
ALTO	UPPER
PISO	FLOOR

Translation of "BUZON"

In previous CASS cycles, an instruction was provided to translate the term "BUZON" to "BOX". This has led to miscoding since the context in which this translation is being performed is inappropriate. When the term 'BUZON" is translated to "BOX", it often results to a match to a "PO BOX" address since "BOX" is a synonym for "PO BOX". However, in Spanish this is not valid. The term "BUZON" is usually associated with a rural route or highway contract address and not with a "PO BOX" address.

In the 1999 - 2000 CASS cycle, software will be tested for proper handling of the term "BUZON" within an address.

C41.3 - C43.2 Front-Loaded String Comparisons

Where common street names exist within a ZIP Code or finance number, software may make erroneous match selections if the only difference between the street names occur at the tail end of the street name. Several examples were shown to demonstrate how simple string comparisons might result in miscoding. Developers must exercise care in performing string comparisons and recognize that small differences occurring at the end of the strings may have significant effect on the accuracy of a match.

No specific testing will be done in the 1999 - 2000 cycle related to front-loaded string comparison logic, except as may be occurring in other categories of the CASS test already described.

C43.3 - C45.2 Line of Travel (LOT)

The CASS Department announced new options for testing of Line of Travel (LOT) certification. In addition to standalone testing as done in previous CASS cycles, LOT can now be certified in combination with CASS ZIP+4 Code certification or CASS Merge certification. If the user or developer wishes the LOT assignment to be tested concurrently with the address standardization and ZIP+4 assignment process, they can request a combined LOT test. If the product being certified only assigns LOT values during the ZIP+4 assignment process, then LOT certification must be performed concurrent with the ZIP+4 certification process.

Merged ZIP+4LOT testing must be performed using data from the same product cycle release. For each CASS question to which a ZIP+4 Code is assigned, software must return the LOT answer. Where any discrepancy between the LOT product or ZIP+4 file exists, the answer returned should be based on the ZIP+4 File. When the correct ZIP+4 Code, delivery point, and carrier route answers are returned on a question, the LOT answer will be graded for accuracy. If any of these components are incorrect, the LOT answer will not be graded and will be bypassed. A 100% accuracy score will be needed to obtain LOT certification.

LOT certification is not mandatory. If LOT is certified separately, LOT certification does not expire unless a change in how LOT values are assigned occurs. If LOT is certified in conjunction with a CASS ZIP+4 or Merge test, then is must be recertified each time a CASS ZIP+4 or Merge test is taken. Where LOT is certified in conjunction with a CASS ZIP+4 or Merge test, the LOT score will not impact the CASS ZIP+4 score. However, if a failure in LOT assignments occur during any subsequent CASS ZIP+4 or Merge testing, the LOT certification will be rescinded.

End of CASS Minutes

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Appendices

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Completing PS Form 3553

The following instructions are provided for the proper completion of PS Form 3553 when submitting for certification. Refer to the instructions shown on the back of PS Form 3553 for additional information.

A1 - CASS/Z4Change/LOT/DPC Utility Certified Company Name:

The Certified Company Name block must contain the name of company under which certification was obtained. End-user modifications made to any certified products require independent certification by the end-user. Certified products must not print a PS Form 3553 if the product has undergone any modifications by an end-user, or if the product is used in a non-certified configuration.

A1 - CASS/Z4Change/LOT/DPC Utility Software Name and Version:

The software name must be the name of the software product which is being submitted for certification.

The software version number is that number under which the certification is being submitted. The version number must adhere to the version control standard as described in Appendix 2 of the CASS Technical Guide. The version control consists of a version number, a revision number, the CASS cycle alphaidentifier, and if applicable, the manufacturer number. The entire version, revision, and cycle number must be reflected on the 3553. The Certified Products Guide will list only the version number.

A1 - CASS/Z4Change/LOT/DPC Utility Configuration:

The configuration consists of a three character alphabetic-identifier associated with a specific software name and version number which represents a set of software parameter settings.

A2 - MASS Certified Company Name:

The MASS certified company name is the name of the company performing MASS certification. Where an end-user is certifying, the end-user company name is used.

A2 - MASS Certified Software Name and Version:

The MASS certified software name and version must be the name and version of the product certified by the system manufacturer.

A2 - MASS Configuration:

The MASS configuration value must be the configuration of the product certified by the system manufacturer.

A2 - MASS MLOCR Serial Number:

The specific serial number of the device upon which the MASS test deck is processed.

B1 - List Processor Name:

The List Processor Name is the name of the company or person(s) responsible for the processing of the address list(s), or mailpieces if processing is done on a MASS-certified system.

B2 - Date List Processed:

This is the date of processing. Where any processing spans more than one date, use the oldest date of processing. For Z4Change processing, the Master File Date List Processed must show the date the entire master file was first processed. The Z4Change Date List Processed must show the date that the Z4Change processing occurred. The Z4Change Date List Processed may not be greater than 3 years after the Master File Date List Processed.

B3 - Date of Database:

This is the product release date of the US Postal Service address information product. All certified software must contain the technology that disables access to outdated Postal Service data as described in the Domestic Mail Manual (DMM) A950, Section 3.0. Products may show the date in either an MM/YY or a MM/DD/YY format. Where an MM/YY format is used, the assumed DD value shall be the 15th.

B4 - Address List Name or ID:

When submitting for certification, put the nine-character customer/file identifier (i.e., 00251ZABU) as supplied by the CASS Department into this block.

B5 - Number of Lists:

When submitting for certification, enter 1 (one).

B6 - Total Records Submitted:

The Total Records Submitted is the number of records contained within the address file or total number of mailpieces processed.

C1 - Total ZIP+4 Coded:

The Total ZIP+4 Coded records must reflect the total number of records assigned an addon (plus 4) by the address matching software. If a match to an "ND" record occurs, do not include in this total since no ZIP+4 code is generated.

C1 - ZIP+4 Validation Period "From" Date:

This must be the same value as the B2 Date List Processed. This date may not be more than 30 days prior to the ZIP+4 file product date (computed using the 15th) and no later than 105 days after the product file date.

C1 - ZIP+4 Validation Period "To" Date:

This date is calculated as the ZIP4-Valid-From date plus 180 days.

C2 - Total Z4Change Processed:

The Total Z4Change Processed field reflects the total number records extracted from an address file. This number would include all address records with ZIP+4 codes shown as requiring reprocessing by the Z4Change product and any address records that had a blank ZIP+4 code if they are reprocessed during the Z4Change processing.

C2 - Z4Change Validation Period Dates:

Not applicable.

C3 - Total Delivery Point Coded:

The Total Delivery Point Coded field contains the total number of records to which a delivery point was assigned. This field may never be greater than the C1-Total ZIP+4 Coded field. If the delivery point values are not assigned or stored at the same time as the ZIP+4 codes, a separate PS Form 3553 must be produced that documents the Total Delivery Point Coded.

C3 - Delivery Point Coded Validation Period Dates:

These fields must equal the C1-ZIP+4 Validation Period Dates when the delivery point values are assigned and/or stored at the same time that the ZIP+4 values are assigned. Where the delivery point values are assigned separately from the ZIP+4 code assignments, these fields must be documented on a separate PS Form 3553.

C4 - Total 5-Digit Coded:

The Total 5-Digit Coded field contains the total number of records for which a 5-digit ZIP Code was assigned, or retained from the input address, during a processing operation.

C4 - 5-Digit Validation Period "From" Date:

The effective processing date for records that were 5-digit coded. This date may be 30 days prior to the either the ZIP+4, Five-Digit ZIP, or the Carrier Route file product date (computed from the 15th) or up to 105 days after the product date.

C4 - 5-Digit Validation Period "To" Date:

This date is calculated as the 5-Digit-Valid-From date plus 365 days.

C5 - Total CR-RT Coded:

The Total Carrier Route Coded is the total number of records which were assigned a carrier route during a processing operation.

C5 - CR-RT Validation Period "From" Date:

The effective processing date for records that were Carrier Route-ID coded. This date may be 30 days prior to the either the ZIP+4 or the Carrier Route file product date (the 15th of each month or bimonth) or up to 105 days after the ZIP+4 of Carrier Route product date.

C5 - CR-RT Validation Period "To" Date:

This date is calculated as the CR-RT-Valid-From date plus 90 days.

C6 - Total LOT Assigned:

The Total of LOT (Line-of-Travel) Sequenced equates to the total number of records which were assigned a LOT sequence number and an ascending or descending code by address matching software.

C6 - LOT Validation Period "From" Date:

The effective processing date for records that were LOT assigned. This date may be 30 days prior to the either the LOT file product date (the 15th of each month or bimonth) or up to 105 days after the LOT file product date.

C6 - LOT Validation Period "To" Date:

This date is calculated as the LOT-Valid-From date plus 90 days.

Federal Register Draft Delivery of Mail to a Commercial Mail Receiving Agent

This section contains a copy of the text contained in the Federal Register / Volume 62, Number 166 / Wednesday, August 27, 1997 / Proposed Rules. This text is being provided for information purposes only. Any discrepancy between this text and the official text shall not be considered a change to the official text, which shall be supersede the text contained herein.

[Federal Register: August 27, 1997 (Volume 62, Number 166)] [Proposed Rules] [Page 45366-45368] From the Federal Register Online via GPO Access [wais.access.gpo.gov] [DOCID:fr27au97-20]

POSTAL SERVICE

39 CFR Part 111

Delivery of Mail to a Commercial Mail Receiving Agency

AGENCY: Postal Service.

ACTION: Notice of proposed rule with request for comments.

SUMMARY: The purpose of this proposal is to amend section D042.2.5 through D042.2.7 of the Domestic Mail Manual to update and clarify procedures for delivery of an addressee's mail to a Commercial Mail Receiving Agency (CMRA). The proposal provides procedures for registration to act as a CMRA; an addressee to request mail delivery to a CMRA; and in delivery of the mail to a CMRA.

DATES: Comments must be received on or before September 26, 1997.

ADDRESSES: Written comments should be mailed to Manager, Delivery, Operations Support, U.S. Postal Service, 475 L 'Enfant Plaza SW Room 7142, Washington, DC 20260-2802. Copies of all written comments will be available for inspection and photocopying between 9:00 a.m. and 4:00 p.m., Monday through Friday, at the above address.

FOR FURTHER INFORMATION CONTACT: Roy E. Gamble, (202) 268-3197.

SUPPLEMENTARY INFORMATION: An appropriate amendment to 39 CFR 111.3 to reflect these changes will be published if the proposal is adopted. The proposal to amend sections D042.2.5 through D042.2.7 of the Domestic Mail Manual is in response to a need to clarify and revise current rules to safeguard the mails. Recent audits indicate that many CMRAs are not in full compliance with current requirements to properly safeguard the mails.

Security of the mails is the issue most important to all customers. Audits and follow-up reviews indicate a need for easy-to-understand rules that receive consistent interpretation to satisfy the different needs and requirements of both the sender and the addressee customer. In some instances, it appears that CMRAs are not aware of or do not fully understand, the current rules. Accordingly, this proposal seeks to clarify and update and adds some new requirements to existing rules. In many instances, these requirements are similar to those for obtaining post office box service.

The proposed requirements are sensitive to the addressee customer's needs and protective of the sender customer's requirement for a secure mail stream. The proposed rules will require Postal Service employees to monitor and enforce compliance. The requirements also emphasize to CMRAs the need for mail security and the consequences of noncompliance.

Summary of proposed changes. Section D042.2.5 confirms the addressee's right to request delivery to a CMRA and provides procedures for a person to establish a commercial mail receiving agency.

Section D042.2.5(b) requires CMRAs to complete and submit Form 1583-A to the postmaster (or designee) to register as a CMRA. The Form 1583-A is a new form that provides a standard vehicle for registration. It also requires the CMRA owner or manager to furnish valid identification to register.

Section D042.2.5(c) requires the postmaster to verify the identity and witness the signature of the CMRA owner or manager. The CMRA owner or manager must also sign the form acknowledging receipt of DMM regulations relevant to the operation of a CMRA.

Section D042.2.5(d) confirms the current policy that CMRAs may not accept accountable mail from their customers for mailing.

Proposed section D042.2.6 clarifies procedures for addressees to request delivery to a CMRA and requirements for delivery of mail to a CMRA, consistent with current rules.

Section D042.2.6(a) requires the addressee and the CMRA to complete Form 1583, and clarifies the type of identification that the addressee must present and the CMRA's responsibility to witness the addressee's signature. This section also requires the CMRA to verify the identity of the addressee and to write the CMRA actual delivery address designation assigned to the addressee in block 3 on Form 1583. This proposal prevents mail delivery to a CMRA without verifiable consent of the actual addressee and reflects current practices to confirm that identification belongs to the person presenting it.

[[Page 45367]]

Section D042.2.6(b) is a new provision that requires addressees to disclose when the private mailbox is being used for the purpose of doing or soliciting business to the public. In this instance, information required to complete Form 1583 may be available to the public under Privacy Act provisions.

Section D042.2.6(c) clarifies the CMRA's responsibility to provide the original Form 1583 to the Postal Service and to maintain a duplicate copy at the CMRA business location.

Proposed D042.2.6(d) provides procedures for when an addressee terminates his or her relationship with the CMRA. As with current rules, the CMRA must write the termination date on its copy of Form 1583. However, unlike the current rule, the proposed rule requires that the CMRA retain the form for 12 months. The CMRA does not provide immediate notice of the termination to the Postal Service; instead, the CMRA submits quarterly updates of the CMRA's customer list to the Postal Service. This replaces the annual submission of such lists as required by the current DMM D042.2.7(d).

Proposed section D042.2.6(e) provides that the CMRA delivery address designation for customer's mail must contain specific address elements identifying it as the location to which a mailpiece is delivered. This proposal is consistent with the current policy of general addressing standards as required by A010.1.1 and A010.1.2, Address Content and Placement.

Proposed D042.2.6(f) confirms the current policy that postal forms are not valid if altered or modified.

Proposed sections D042.2.6 (g) and (h) confirm the current policy that subjects the CMRA to suspension of delivery if the CMRA is not in full compliance with requirements for operating a CMRA.

Proposed sections D042.2.7 clarifies the handling of mail by CMRAs, particularly mail addressed to former customers.

Sections D042.2.7 (a) and (b) reiterate current policy that the addressee and CMRA may not file change-of-address orders when the relationship terminates and that mail re-mailed by the CMRA must have new postage affixed.

Section D042.2.7(c) changes the time interval from annual to quarterly for CMRAs to submit to the Postal Service an alphabetical list of all its customers including those terminated within the last 12 months.

Proposed section D042.2.7(d) clarifies regulations for refusal of mail. The CMRA must accept and if necessary re-mail (with new postage) mail addressed to current customers and customers who have terminated their relationship with the CMRA within the last 12 months. If mail is received more than 12 months after the customer relationship with the CMRA terminates, the CMRA may return the mail to the Postal Service, endorsed as required by section D042.2.7(e).

Section D042.2.7(e) confirms the obligation of the CMRA to return to the Postal Service mail for any addressee for whom the CMRA does not have a valid Form 1583. It also requires the CMRA to endorse this mail as specified and return it to the Postal Service the next business day after receipt. The section also confirms the obligation of the CMRA to return misdelivered mail to the Postal Service.

Section D042.2.7(f) specifies that the CMRA must not deposit any return mail into a collection box. The CMRA must return this mail to the post office or give it to the letter carrier responsible for delivery to the CMRA.

Although exempt from the notice and comment requirements of the Administrative Procedures Act (5 U.S.C. of 553 (b), (c)) regarding proposed rulemaking by 39 U.S.C. 410(a), the Postal Service invites public comment on the following proposed revisions to the Domestic Mail Manual, incorporated by reference in the Code of Federal Regulations. See 39 CFR 111.1.

List of Subjects in 39 CFR Part 111

Postal Service.

PART 111--[AMENDED]

1. The authority citation for 39 CFR part 111 continues to read as follows:

Authority: 5 U.S.C. 552(a); 39 U.S.C. 101, 401, 403, 404, 3001-3011, 3201-3219, 3403-3406, 3621, 5001.

2. Section D042.2.0 of the Domestic Mail Manual is amended by revising subsections D042.2.5, D042.2.6, and D042.2.7 to read as follows:

Part D042--Conditions of Delivery

* * * * *

2.0 DELIVERY TO ANOTHER

* * * * *

2.5 CMRA

a. An addressee may request mail delivery to a commercial mail receiving agency (CMRA). The CMRA accepts delivery of the mail and holds it for pickup or re-mails it to the addressee, prepaid with new postage.

b. Each CMRA must register with the post office responsible for delivery to the CMRA. Any person who establishes, owns or manages a CMRA must provide a Form 1583-A, Application to Act as Commercial Mail Receiving Agency, to the postmaster (or designee) responsible for the delivery address. The CMRA owner or manager must complete all entries and sign the Form 1583-A. The CMRA owner or manager must furnish two items of valid identification; one item must contain a photograph of the CMRA owner or manager. The following are examples of acceptable identification:

- (1) Valid driver's license.
- (2) Armed forces, government, or recognized corporate identification card.
- (3) Passport or alien registration card.
- (4) Other credential showing the applicant's signature and a serial number or similar information that is traceable to the bearer

The postmaster (or designee) may retain a photocopy of the identification for verification purposes. Furnishing false information on the application or refusing to give required information will be reason for denying the application. When any information required on Form 1583-A changes or becomes obsolete, the CMRA owner or manager must file a revised application with the postmaster.

- c. The postmaster (or designee) must verify the documentation to confirm that the CMRA owner or manager resides at the permanent home address shown on the Form 1583-A; witness the signature of the CMRA owner or manager; and sign the Form 1583-A. The postmaster must provide the CMRA with a copy of the DMM regulations relevant to the operation of a CMRA. The CMRA owner or manager must sign the Form 1583-A acknowledging receipt of the regulations. The postmaster must file the original of the completed Form 1583-A at the post office and provide the CMRA with a duplicate copy.
- d. The approval of Form 1583-A does not authorize the CMRA to accept accountable mail (for example: Registered, Insured, or COD) from their customers for mailing. The only acceptable mailing point for accountable mail is the post office.

2.6 Delivery to CMRA

a. Mail delivery to a CMRA requires that both the owner or manager and each addressee complete and sign Form 1583, Application for Delivery of Mail Through Agent. The CMRA owner or manager, or authorized employee, or a notary public must witness the signature of the addressee. The addressee must complete all entries on Form 1583. The CMRA owner or manager must verify the documentation to confirm that the addressee resides or conducts business at the permanent

[[Page 45368]]

address shown on Form 1583. Furnishing false information on the application or refusing to give required information will be reason for withholding the addressee's mail from delivery to the agency and returning it to the sender. When any information required on Form 1583 changes or becomes obsolete, the addressee must file a revised application with the CMRA. The addressee must furnish two items of valid identification; one item must contain a photograph of the addressee. The following are examples of acceptable identification:

- (1) Valid driver's license.
- (2) Armed forces, government, or recognized corporate identification card.
- (3) Passport or alien registration card.
- (4) Other credential showing the applicant's signature and a serial number or similar information that is traceable to the bearer.

The CMRA owner or manager may retain a photocopy of the identification for verification purposes. The CMRA owner or manager must list the two forms of identification (block 9) and write the complete CMRA actual delivery address designation used to deliver mail to the addressee (block 3) on Form 1583.

- b. The addressee must disclose on Form 1583 when the private mailbox is being used for the purpose of doing or soliciting business to the public. The information required to complete this form may be available to the public if ''ves" in block 5 on Form 1583 is checked.
- c. The CMRA must provide the original completed Forms 1583 to the postmaster. The CMRA must maintain duplicate copies of completed Forms 1583 on file at the CMRA business location. The Forms 1583 must be available at all times for examination by postal representatives and the Postal Inspection Service. The postmaster must file the original Forms 1583 alphabetically by last name of the addressee for each CMRA at the station, branch, or post office. The postmaster files the original Forms 1583 without verifying the address of residence or firm shown on the Forms 1583. Verification is required only when the postmaster receives a request by the Inspector-In-Charge, or when there is reason to believe the addressee's mail may be, or is being, used for unlawful purposes.
- d. When the agency relationship between the CMRA and the addressee terminates, the CMRA must write the date of termination on its duplicate copy of Form 1583. The CMRA must notify the post office of termination dates through the quarterly updates (due on January 1, April 1, July 1, and October 1) of the alphabetical list of customers cross-referenced to the CMRA actual addressee delivery designations. The alphabetical list must contain all new customers, current customers, and those customers who terminated within the last 12 months, including the date of termination. The CMRA must retain the endorsed duplicate copies of Forms 1583 for 12 months after the termination date. Forms 1583 filed at the CMRA business location must be available at all times for examination by postal representatives and the Postal Inspection Service.
- e. A CMRA must represent its delivery address designations for the intended addressees as a private mailbox (PMB). The CMRA delivery address designations must specify the location to which a mailpiece is delivered. Mail pieces must bear delivery address designations that contain at least the following elements, in this order:
 - (1) Intended addressee's name or other identification. Examples: Joe Doe or ABC CO.
 - (2) PMB and number. Example: PMB 234.
- (3) Street number and name or post office box number or rural route designation and number. Examples: 10 Main St or PO BOX 34 or RR 1 BOX 12.
 - (4) City, state and ZIP Code (5-digit or ZIP+4). Example: Herndon Va 22071-2716.

The CMRA must write the complete CMRA actual delivery address designation used to deliver mail to each individual addressee or firm on the PS Forms 1583 (block 3).

- f. A CMRA or the addressee must not modify or alter Form 1583 or Form 1583-A. Modified or altered forms are invalid and the addressee's mail returned to sender in accordance with Postal Service regulations.
- g. The CMRA must be in full compliance with DMM D042.2.5 through D042.2.7 and other applicable postal requirements to receive delivery of mail from the post office.
- h. The postmaster may, with the next higher level approval and notification to the Inspector-In-Charge, suspend delivery to a CMRA that, after proper notification, fails to comply with D042.2.5 through D042.2.7 or other applicable postal requirements.

2.7 Addressee and CMRA Agreement

In delivery of the mail to the CMRA, the addressee and the CMRA agree that:

- a. When the agency relationship between the CMRA and the addressee terminates, neither the addressee nor the CMRA will file a change-of-address order with the post office.
- b. The CMRA must re-mail mail intended for the addressee for 12 months after the termination date of the agency relationship between CMRA and addressee. When re-mailed by the CMRA, mail requires payment of new postage.

- c. The CMRA must provide to the postmaster a quarterly list (due January 1, April 1, July 1, and October 1) of its customers in alphabetical order cross-referenced to the CMRA actual addressee delivery designations. The alphabetical list must contain all new customers, current customers, and those customers who terminated within the last 12 months, including the date of termination.
- d. A CMRA may not refuse delivery of mail if the mail is for an addressee that is a customer or former customer (within the last 12 months). The agreement between the addressee and the CMRA obligates the CMRA to receive all mail, except restricted delivery, for the addressee. The addressee may authorize the CMRA in writing on Form 1583 (block 6) to receive restricted delivery mail for the addressee.
- e. If the CMRA has no Form 1583 on file for an intended addressee, the CMRA must return that mail to the post office responsible for delivery. The CMRA must return this mail to the post office the next business day after receipt with this proper endorsement: "Undeliverable, Commercial Mail Receiving Agency, No Authorization To Receive Mail for This Addressee." Return this mail without payment of new postage to the post office. The CMRA must also return misdelivered mail the next business day after receipt.
- f. The CMRA must not deposit return mail in a collection box. Return mail must be returned to the post office or given to the letter carrier responsible for delivery to the CMRA.

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Stanley F. Mires, Chief Counsel, Legislative. [FR Doc. 97-22694 Filed 8-26-97; 8:45 am] BILLING CODE 7710-12-P

CODING ACCURACY SUPPORT SYSTEM RECORD LAYOUT AND DATA ELEMENTS

HEADER RECORD

FIELD	\LOOND			
SEQUENCE	FIELD		Pos	ITION
NUMBER	DESCRIPTION	LENGTH		/Thru
1	FILLER	3	001	003
2	FILE-VERSION-MONTH	2	004	005
3	File-Version-Day	2	006	007
4	FILE-VERSION-YEAR	4	800	011
5	COPYRIGHT-SYMBOL	11	012	022
6	SEQUENCE-NUMBER	3	023	025
7	Customer-Number	9	026	034
8	SYSTEM-NAME	5	035	039
9	STAGE-NUMBER	6	040	045
10	3553-A1-CASS-Z4CHANGE-COMPANY-NAME	40	046	085
11	3553-A1-LOT-DPC-UTILITY-COMPANY-NAME	40	086	125
12	3553-A1-CASS-Z4Change-Configuration	3	126	128
13	3553-A1-LOT-DPC-UTILITY-CONFIGURATION	3	129	131
14	3553-A1-CASS-Z4Change-Software-Name	30	132	161
15	3553-A1-CASS-Z4Change-Software-Version	16	162	177
16	3553-A1-LOT-DPC-Software-Name	30	178	207
17	3553-A1-LOT-DPC-Software-Version	16	208	223
18	3553-B1-List-Processor-Name	25	224	248
19	3553-B2-Master-File-Process-Date	8	249	256
20	3553-B2-Z4Change-Process-Date	8	257	264
21	3553-B2-LOT-PROCESS-DATE	8	265	272
22	3553-B2-CRIS-PROCESS-DATE	8	273	280
23	3553-B3-ZIP+4-DATABASE-DATE	8	281	288
24	FILLER	8	289	296
25	3553-B3-LOT-DATABASE-DATE	8	297	304
26	3553-B3-CRIS-DATABASE-DATE	8	305	312
27	3553-B4-Address-List-Name	25	313	337
28	3553-B5-Number-Lists-Processed	3	338	340
29	3553-B6-Total-Records-Submitted	6	341	346
30	3553-C1-Total-Records-ZIP+4-Coded	6	347	352
31	3553-C1-ZIP+4-VALID-FROM-DATE	8	353	360
32	3553-C1-ZIP+4-VALID-TO-DATE	8	361	368
33	FILLER	22	369	390
34	3553-C3-Total-DPBC-Coded	6	391	396
35	3553-C3-DPBC-VALID-FROM-DATE	8	397	404
36	3553-C3-DPBC-VALID-TO-DATE	8	405	412
37	3553-C4-Total-Records-5Digit-Coded	6	413	418
38	3553-C4-5Digit-Valid-From-Date	8	419	426
39	3553-C4-5Digit-Valid-To-Date	8	427	434
40	3553-C5-Total-Records-CRIS-Coded	6	435	440
41	3553-C5-CRIS-Valid-From-Date	8	441	448
42	3553-C5-CRIS-Valid-To-Date	8	449	456
43	3553-C6-Total-Records-LOT-Coded	6	457	462
44	3553-C6-LOT-VALID-FROM-DATE	8	463	470
45	3553-C6-LOT-VALID-TO-DATE	8	471	478
46	FILLER	122	479	600
40	I ILLLN	144	713	000

CODING ACCURACY SUPPORT SYSTEM RECORD LAYOUT AND DATA ELEMENTS

DETAIL RECORD

FIELD SEQUENCE	FIELD		Posi	ITION
NUMBER	DESCRIPTION	LENGTH		/THRU
TTOMBER	DECOMM NOW	LENGIII	1 10111	111110
1	CUOTOMED ID	0	001	009
1 2	Customer-ID Cass-Key	9 11	010	020
			010	
3	ZIP-CODE-ANSWER	5	_	025
4	ZIP-CODE-ALTERNATE-ANSWER-ALLOWED *	1	026	026
5	ZIP-CODE-INCLUDE-IN-3553 *	1	027	027
6	ZIP+4-ADD-ON-ANSWER	4	028	031
7	ZIP+4-ADD-On-Include-In-3553 *	1	032	032
8	DELIVERY-POINT-ANSWER	2	033	034
9	DELIVERY-POINT-INLCUDE-IN-3553 *	1	035	035
10	DELIVERY-POINT-CHECK-DIGIT-ANSWER	1	036	036
11	CARRIER-ROUTE-ANSWER	4	037	040
12	CARRIER-ROUTE-ALTERNATE-ANSWER-ALLOWED *	1	041	041
13	CARRIER-ROUTE-INCLUDE-IN-3553 *	1	042	042
14	CITY-NAME-ANSWER	28	043	070
15	CITY-NAME-ALTERNATE-ANSWER-ALLOWED *	1	071	071
16	STATE-CODE-ANSWER	2	072	073
17	URBANIZATION-ANSWER	28	074	101
18	FIRM-NAME-ANSWER	40	102	141
19	Delivery-Address-Line1-Answer	64	142	205
20	Delivery-Address-Line1-Alternate-Answer-Allowed *	1	206	206
21	Delivery-Address-Line2-Answer	64	207	270
22	Delivery-Address-Line2-Alternate-Answer-Allowed *	1	271	271
23	LOCATABLE-ADDRESS-CONVERSION-INDICATOR	1	272	272
24	LINE-OF-TRAVEL-SEQUENCE-NUMBER-ANSWER	4	273	276
25	LINE-OF-TRAVEL-ASCENDING-DESCENDING-ANSWER	1	277	277
26	FIRM-OR-RECIPIENT-INPUT	40	278	317
27	Urbanization-Input	28	318	345
28	DELIVERY-ADDRESS-LINE1-INPUT	64	346	409
29	DELIVERY-ADDRESS-LINE2-INPUT	64	410	473
30	LAST-LINE-INPUT	42	474	515
31	National-Deliverability-Index-Code	1	516	516
32	RECORD-TYPE-CODE *	1	517	517
33	CATEGORY-SUBCATEGORY-INDICATOR *	2	518	519
34	USPS-Internal-Research-Development-Flag *	1	520	520
35	Non-Deliverable-Record-Indicator *	1	521	521
36	MULTIPLE-RESPONSE-ZIP+4-ANSWER-1*	9	522	530
37	MULTIPLE-RESPONSE-ZIP+4-ANSWER-2*	9	531	539
38	FILLER	61	540	600
50	I ILLEN	UI	J + U	000

^{*} FIELDS VALID WITHIN STAGE 1 FILE ONLY.

CATEGORY MATRIX GUIDE

The following matrix provides instructions for the new categories and subcategories that will be used in addition to the current matrix.

Category/ Subcategory	Topic	Description	Expected Action	Mandatory Optional
Any / All	City Name Abbreviated	City contains an abbreviated or spelled out directional or suffix word. Alternate presentation not shown in the City/State File.	Recognize alternate presentation and match.	Mandatory
B,C,D,E	Overweighted Street Component Matching	Input address is valid except for mistake in directional or suffix which could cause input address to match within another city or ZIP Code.	Match within the input city and/or ZIP Code, correcting directional or suffix.	Mandatory
AE	Normalized Street Names	One or more components within the street name are abbreviated	Recognize abbreviation and match	Optional
AF	Street Name Spelling Variation	Addresses with all components valid except minor spelling variation in the street name field	Correct the spelling to match within the input city and ZIP Code	Mandatory
BE	Normalized Street Names	One or more components within the street name are abbreviated	Recognize the abbreviation and match	Optional
W2	Multi-finance number matching	Address presentation is altered to be more like a street within another finance number	Correct street presentation to match within the finance number associates with input city and ZIP Code	Mandatory
W3	Multi-finance number matching	Input city and ZIP Code are from different finance numbers, input address does not exist in city	Match record using input ZIP Code only, do not match to a different ZIP Code	Optional
W4	Multi-finance number matching	City and ZIP Code from different finance numbers. A match exists that would cause city and ZIP Code to be changed	Do not match if both the city and ZIP Code will be changed if evaluating multiple finance numbers	Mandatory
W5	Multi-finance number matching	City and ZIP from different finance numbers. State does not agree with ZIP Code.	Do not match	Mandatory
4A	Unique ZIP Code	Input city and ZIP Code are valid in combination with each other. Input add-on is blank or invalid. Match found in unique ZIP Code.	Match within the unique ZIP Code. Assign add-on from matched record.	Mandatory

CATEGORY MATRIX GUIDE

Category/ Topic Subcategory		Description	Expected Action	Mandatory Optional	
4B	Unique ZIP Code	Input city and ZIP Code are valid in combination with each other. Match is found within unique ZIP Code. Input add-on is valid within unique ZIP Code	Match within the unique ZIP Code. Retain input add-on	Mandatory	
4C	Unique ZIP Code	Input city and ZIP Code are valid in combination with each other. Match is not found.	Default add-on assignment to - 0001, CRID to C000.	Mandatory	
4D	Unique ZIP Code	Input city and ZIP Code are valid in combination with each other. Match is not found within the unique ZIP Code. Input add-on is a valid add-on within the unique ZIP Code.	Retain unique ZIP Code. Retain input add-on. Return CRID based on input add-on.	Mandatory	
4E	Unique ZIP Code	Input city and ZIP Code are not valid in combination with each other. Match found within city.	Match using input city name and correct ZIP Code.	Mandatory	
4F	Unique ZIP Code	Input city and ZIP Code are not valid in combination with each other. Match is not found within city.	Do not match. Delete input ZIP Code and return spaces.	Mandatory	
5J	Puerto Rico	Input address contains standalone word "Buzon"	Do not treat as PO Box. Do not match.	Mandatory	
5K	Puerto Rico	Input address has blank urbanization field. Two or more ZIP+4 records exist but only one has blank urbanization field	Match input address to ZIP+4 record with blank urbanization.	Optional	
6E	Magnet Streets	Input address parsed street name or ZIP+4 record street name only contain a directional or suffix word.	Do not match unless all components between input and ZIP+4 record agree.	Mandatory	
6F	Magnet Streets	Input address contains variance in directional or suffix presentation.	Recognize variance in presentation and match.	Mandatory	
6K	Magnet Streets	Input address has trailing numeric/alpha value following a valid suffix. If trailing value is parsed as secondary, an incorrect match can result.	Parse input address correctly and match.	Mandatory	
6G	Multiple Parse Variations	Input address has suffix or directional dropped which may affect parse.	Match address to ZIP+4 record more alike the input.	Mandatory	
6Н	Multiple Parse Variations	Input address has a street name incorrectly containing a space. Word following street name is designator, suffix, or directional value	Concatenate street name and following word to match where appropriate.	Mandatory	
7A	Multiple address lines	Input address is split between two lines/fields	Concatenate fields to derive correct match	Optional	

Partnership in Tomorrow October 6 - 8, 1998 Attendee List

Attendee List							
Name	Company Name	Address	City / State /ZIP+4 Code	Telephone	Fax Number	Email Address	
Jay Chambers Buddy Spiegel Douglas Matyaschuh Bill St John Jim Newman Rich Wojdyla Bill Reid Mike Garrean Mary Fulton Steve Hill Dave Pittner Larry Edgar-Smith Fred Lawson Joann Norton Andrew Ziegler Jerry Wasicek	Acxiom Anchor Computer Anchor Computer Bell & Howell Bell & Howell Bell & Howell Bell & Howell Consolidate Business Systems Consolidated Business Systems Creative Automation Creative Automation Datatech Dynamark Dynamark Dynamic Marketing Dynamic Mktn Services	301 Industrial Blvd 450 Fairway Dr Ste 205 1900 New Hickway 1616 Corporate Ct Ste 100 1616 Corporate Ct Ste 100 6800 N McCormick Blvd 6800 N McCormick Blvd 10303 Crown Point Ave 10303 Crown Point Ave 220 Fence Ln 220 Fence Ln 10 Clipper Rd 4290 Lexington Ave N 4295 Lexington Ave N 5884 Point West Dr 5884 Pt West Dr	Conway AR 72032-7168 Deerfield Beach FL 33442-1837 Farmingdale NY 11735-1537 Irving TX 75038-2205 Irving TX 75038-2205 Chicago IL 60645-2785 Chicago IL 60645-2785 Omaha NE 68132-1061 Omaha NE 68132-1061 Hillside IL 60162-2039 Hillside IL 60162-2093 Conshohocken PA 19428-2744 St Paul MN 55126-6166 St Paul MN 55126-6166 Houston TX 77036-2612 Houston TX 77036-2612	(501) 336-2827 (954) 428-2170 (516) 293-6100 (972) 753-0711 (972) 753-0711 (847) 982-6661 (847) 329-7100 (402) 964-9998 (402) 963-2035 (708) 236-2308 (708) 236-2445 (610) 825-5205 (651) 486-1725 (651) 486-450 (713) 995-2200 (713) 995-2235	(501) 336-3943 (954) 428-2122 (516) 293-0891 (972) 753-0902 (972) 753-0902 (847) 568-6716 (610) 825-1397 (651) 481-8077 (651) 481-8077 (713) 995-2307 (713) 995-2201	jchamb@acxiom.com buddys@anchorcomp.com doug@anchor-computer.com bstjohn@psi.bellhowell.com jnewman555@aol.com rwojdyla@psi.bellhowell.com reids@bellhowell.com mgarrean@cas-online.com mfulton@cas-online.com shill@cauto.com dpittner@cauto.com larrye.datatech.com fredlawson@dynamark.com joannenorton@dynamark.com ansziegler@dynamic-marketing.com jerry.wasicek@dynamic- marketing.com	
Van Saukman	Equifax	11011 Richmond Ave	Houston TX 77084-6720	(713) 974-8946		marketing.com	
Andrea B Riddle Becky Mize	Equifax Equifax Credit Marketing	1525 Windware Concourse 1525 WindWare Concourse	Alpharetta GA 30005-8884 Alpharetta GA 30005-8884	(770) 740-4885 (770) 740-4369	(770) 740-5863 (770) 740-5863	andrea.riddle@equifax.com	
Gretchen Schroeter Dan Minnick George Baunach Don Waltz Julie Wajda Harry Kitchen Mary Covert Paul Helvick	Experian (Metromail) Experian Direct Tech Experian Direct Tech Experian Direct Tech First Data Solutions	360 E 22nd St 955 American Ln 955 American Ln 955 American Ln 2102 N 117 th Ste 100 1235 N Ave 1235 N Ave 2934 La Quanta Dr	Lombard IL 60148-4989 Schaumburg IL 60173-4998 Schaumburg IL 60173-4998 Schaumburg IL 60173-4998 Omaha NE 68164-3683 Nevada IA 50201-1419 Nevada IA 50201-1419 Missouri City TX 77459-3128	(630) 932-2784 (847) 517-5683 (847) 517-5683 (847) 517-5683 (402) 498-7321 (515) 382-8343 (515) 382-8304 (281) 835-0396	(630) 705-4805 (847) 517-5189 (847) 517-5189 (847) 517-5189 (515) 382-8238	gretchen.schroeter@experian.com dan.minnick@experian.com george.baunach@experian.com don.waltz@experian.com julie.wajda@firstdatacorp.com harrykitchen@firstdatacorp.com marycovert@firstdatacorp.com	
Mike Butterbrodt Tony Maas Rick Coleman Michael Burlison Ed Lyons David Whelan Graham Horkley Tim King John Nicoli	Firstlogic Firstlogic Global Lfie & Accident Insurance Global Life & Accident Group 1 Software Harte Hanks	100 Harborview 100 Harborview 133 NW 122nd St 133 NW 122nd St 4200 Parliament PI Ste 600 4200 Parliament PI 4200 Parliament PI Ste 600 4200 Parliament PI 25 Linnell Cir	La Crosse WI 54601-4071 La Crosse WI 54601-4071 Oklahoma City OK 73114-7214 Oklahoma City OK 73114-7214 Lanham MD 20706-1844 Lanham MD 20706-1812 Lanham MD 20706-1844 Lanham MD 20706-1844 Billerica MA 01821-3961	(608) 788-8700 (608) 788-8700 (405) 755-8282 (405) 755-8282 (301) 918-0319 (301) 918-0370 (301) 918-0346 (978) 663-9955	(608) 788-1188 (608) 788-1188 (405) 752-9341 (301) 918-0463 (301) 918-0463 (301) 731-0360	mikeb@firstlogic.com tonym@firstlogic.com rcoleman@torchmarkcorp.com mburlison@torchmarkcorp.com edlyons@g1.com dave-whelan@g1.com graham-horkley@g1.com tim-king@g1.com jnicoli@hartehanks.com	

Partnership in Tomorrow October 6 - 8, 1998 Attendee List

		Attendee List							
Name	Company Name	Address	City / State /ZIP+4 Code	Telephone	Fax Number	Email Address			
Mike Fitzgerald Dennis Kenbeek Thomas Piazza Bill Wheeler John Nydam Chris Young Sean M Kelly Jeff Hartigan Steve Sieloff Mike Pauletti Larrry Canumico	Harte Hanks Data Services Id Mail Systems LCS Ind Lockheed Martin PTI Mailer's Software Mailnet Services MapInfo Corp May & Speh May & Speh May & Speh May & Speh MBS/Multimode	6701 Baymeadow Dr 20 Tuttle PI 120 Brighten Rd 6201 E 43rd St 970 Calle Negocio 701 Murfreesboro Rd 2 Global View 1501 Opus PI Ste 100 1501 Opus PI Ste 100 1501 Opus PI Ste 100 570 S Research PI	Glen Burnie MD 21060-6401 Middletown CT 06457-1870 Clifton NJ 07012-1694 Tulsa OK 74135-6562 San Clemente CA 92673-6201 Nashville TN 37210-4521 Troy NY 12180-8368 Downers Grove IL 60515-5727 Downers Grove IL 60515-5727 Downers Grove IL 60515-5727 Central Islip Ny 11722-4415	(410) 424-2050 (860) 635-7999 (973) 778-5588 (918) 622-7122 (949) 492-7000 (615) 843-6010 (518) 285-7349 (630) 719-0514 (630) 719-0514 (630) 719-0514 (516) 851-5045	(410) 424-2052 (890) 635-8393 (973) 778-1274 (949) 492-7086 (615) 825-1397 (630) 719-0492 (630) 719-0492 (630) 719-0492 (516) 851-1350	mjfitzgerald@harte-hanks.com denniskenbeek@compuserve.com tpiazza@lcsi.com bill.wheeler@postnetech.com johnn@900mail.com chris@listcleanup.com sean.kelly@mapinfo.com jhartigan@mayspeh.com ssieloff@mayspeh.com mpauletti@ms.acxiom.com			
John Lemler Larry Bettinger David Brown Art Davis Tim Bell	MBS/Multimode Merkle Data Technologies National Systems Corp NCSC NCSC/ Fastfoward	570 S Research PI 8400 Corporate Dr 414 N Orleans St Ste 501 6060 Primacy Pkwy Ste 101 6060 Primacy Pkwy Ste 101	Central Islip NY 11722-4415 Lanham MD 20725 Chicago IL 60610-4490 Memphis TN 38188-0001 Memphis TN 38188-0001	(516) 851-5102 (301)429-4260 (312) 855-1000 (901) 681-4686 (800) 238-3150	(301) 459-8431 (312) 222-1605 (901) 681-4521	lemle.john@mbs.com lbettinger@merklenet.com dbrown@aivia.com adavis3@email.usps.gov			
David Leonard Mike Corbett Steve Lute Ed Danley Josie Pribbenow Bryan Sears Beach Clow Eugene R Gaby Joe Mungo Rick Peckos Bob Brown	Pitney Bowes Pitney Bowes Software Systems Pitney Bowes Software Systems Pitney Bowes Software Systems Quad Data Services Qualitative Marketing Software Qualitative Marketing Software Siemens Electrocom Siemens Electrocom L.P. TCS The Polk Company	35 Waterview Dr 750 Warrenville Rd Ste 300 750 Warrenville Rd Ste 500 750 Warrenville Rd Ste 500 555 S 108th St 2900 Center Green Ct Ste 200 2900 Center Green Ct Ste 200 2910 Avenue F 2910 Avenue F 1 N Dale Mabry 400 Pike St	Shelton CT 06095-4339 Lisle IL 60532-3618 Lisle IL 60532-3618 Lisle IL 60532-3618 West Allis WI 53214-1145 Boulder CO 80301-5418 Boulder CO 80301-5418 Arlington TX 78011-5276 Arlington TX 76011-5276 Tampa FL 33609-2700 Cincinnati OH 45202-4223	(203) 924-3334 (630) 435-7411 (630) 435-7410 (630) 435-7434 (414) 443-3401 (303) 440-2838 (303) 442-2838 (817) 695-5173 (817) 695-3132 (813) 554-2106 (513) 455-6337	(630) 435-7402 (630) 435-7402 (630) 435-7402 (414) 267-8392 (303)440-3523 (817) 695-7536 (813) 878-6475 (513) 381-3885	leonard@pb.com mcorbett@pbss.com slute@pbss.com edanley@pbss.com jpribbenow@qgrap.com bryan@qmsoft.com beach@qmsoft.com erg@ecaard.com jcm@ecacard.com peckos@tcs.e-mail.com			
Kellee Remer Steve Hungler Julie Thinnes Joel Kroh Alan Morse Patrick Ring Peter Bombassaro Leon Stewart	The Polk Company The Polk Company The Polk Company Time Customer Service Inc Triplex United States Postal Service United States Postal Service Works Right Software	2695 S Northwestern Hwy 400 Pike St 400 Pike St 1 N Dale Mabry PO Box 1800 PO Box 9996 PO Box 9621 PO Box 1156	Southfield MI 48034-8455 Cincinnati OH 45202-4223 Cincinnati OH 45202-4223 Tampa FL 33609-2700 Novato CA 94948-1800 Boston MA 02205-9621 Boston Ma 02205-9621 Madison MS 39130-1156	(248) 728-7731 (513) 381-3885 (513) 455-6313 (813) 554-2026 (415) 382-7028 (617) 654-5700 (617) 654-5366 (601) 856-8337	(248) 728-7125 (513) 455-6029 (813) 878-6475 (415) 382-7088 (617) 654-5286 (617) 654-5286 (601) 856-9432	stevehungler@polk.com julie-thinnes@polk.com krohj@tcs.e-mail.com alan@tdmc.com pring@email-usps.gov pbombass@email.usps.gov software@worksright.com			